Impact of COVID-19 on School Teaching and Response

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Abstract:

COVID-19 has caused a huge impact on people's lives, work, and learning, and school teaching has also been greatly affected. This article expounds the impact of COVID-19 on school teaching from 4 aspects: physical health, mental state, teacher-student adaptability, and teaching arrangements. And put forward countermeasures from the following perspectives: 1. Strengthen life health and ideological and moral education; 2. reasonably arrange physical education courses; 3. Pay attention to students' psychological state; 4. Improve the level of education informatization; 5. Flexible change the teaching model; 6. Get ready for school. Finally, this article summarizes the impact of COVID-19 on teaching and makes a prospect for future teaching development.

Keywords: COVID-19; impact of epidemic; school teaching; online education

At the end of 2019, the outbreak of pneumonia caused by a new type of coronavirus (new crown pneumonia or COVID-19 for short) spread rapidly throughout the world. The World Health Organization has defined it as a global pandemic on March 11, 2020. Disease [1]. In order to curb the spread of COVID-19, China has launched various epidemic prevention and control work as early as January 2020, including the cancellation of large-scale events, closure of public places, delaying resumption of work and school, implementation of traffic control, and community isolation. These measures can effectively delay the spread of COVID-19, lay a solid foundation for defeating the COVID-19, and provide valuable experience for other countries in the world [2], but at the same time, they will not only cause major economic losses, but also hinder school teaching. In order to reduce the impact of COVID-19 on teaching, various places have implemented "stopping classes without stopping school", using the Internet, cable TV and other platforms to carry out teaching to help students learn at home [3]. Adopting special teaching methods in special times reflects the great wisdom of educators, and also provides valuable experience for promoting the application of information technology in future teaching and responding to emergencies.

1. The impact of COVID-19

Affected by COVID-19, the Ministry of Education of the People's Republic of China issued the "Notice on the Postponement of the 2020 Spring Semester" on January 27, 2020, and decided to postpone the start time of universities and middle schools, primary schools and kindergartens [4], and with the development of COVID-19, school starts Time has been delayed many times. Subsequently, the Ministry of Education issued the document "Using Internet Platforms, "Suspension of Classes Without Suspension"" on January 29, which provided guidance on teaching during COVID-19[5]. Traditional classroom teaching cannot be carried out normally, and online education has become the mainstream method of school teaching in extraordinary times. However, under the epidemic, what impact has this passive change of school teaching status brought?

1.1. Impact on physical health

As COVID-19 is coming, maintaining good health is the primary task, and guiding students to thrive is also one of the responsibilities of education. As an acute disease, new coronary pneumonia has a long incubation period and is highly infectious[6], which necessitates strict sanitation and epidemic prevention measures such as community isolation and home isolation. At the same time, new coronary pneumonia is considered to be a self-limiting disease [7], and resistance plays an extremely important role in its resistance and recovery. In addition, most of the student population is at a critical stage of growth and development,

and moderate exercise can promote physical growth and stimulate growth hormone secretion [8]. Therefore, under the condition that they are unable to participate in the school's traditional physical education curriculum and outdoor activities are restricted, it is difficult to meet the sports needs of students. How to maintain physical health and enhance physical fitness has become a problem. In addition, due to limited activities and the need for online education, students' time facing electronic products has increased dramatically, which may also bring the risk of vision loss.

1.2. Impact on mental health

Public health emergencies often bring greater psychological pressure to people, and this impact is not limited to patients and their relatives and friends. Most ordinary people will also be affected [9]. Compared with usual, during COVID-19, both life and study status have undergone certain changes, and this change is sudden, and most people are not prepared, so psychological fluctuations are inevitable. And with the development of COVID-19 situation, the psychological state of the people will continue to fluctuate. For example, in the initial stage of COVID-19, excessive tension or excessive contempt due to lack of awareness of COVID-19; panic as COVID-19 spreads; due to home Worry, emptiness, depression, depression and other mentality caused by long isolation time and uncertain start time. At the same time, for most students, their minds are not mature, they are easily affected by external factors, and their ability to discriminate false information is weak. In today's information explosion era, the impact of bad and false information cannot be ignored. Therefore, how to help students overcome bad psychology and maintain a good attitude is another challenge during COVID-19.

1.3. Impact on the adaptability of teachers and students

In recent years, Chinese online education has achieved vigorous development. The concept of "Internet + education" has accelerated the pace of education informatization. However, due to its own limitations, hardware constraints, and the adaptability of teachers and students, online education It is still mainly used as an auxiliary means of traditional education, and it is mainly adult education, with a relatively low proportion of basic education [10]. Therefore, the passive popularization of online education during COVID-19 is bound to be a challenge to the adaptability of most teachers and students.

For teachers, the recorded or live-streamed lessons of online education are quite different from daily teaching. Because most teachers lack online teaching experience, they often need to invest more energy in writing lesson plans and a lot of time. Preparing for online courses has increased the difficulty of preparing lessons and teaching pressure, and the quality of teaching is also difficult to guarantee. For students, the classroom environment suddenly shifted from a serious classroom to a comfortable home, and the learning atmosphere suddenly dropped. The interaction between teachers and students also changed from real to virtual, and the restraint of learning became lower, making it more prone to burnout and difficulty. Concentration and other issues also place higher demands on students' self-control. In addition, not all teachers and students have the skill to operate electronic equipment, which brings uncertainties to the development of online education. Finally, insufficient preparation of hardware conditions, such as screen freezes, system crashes, and even hardware shortages, are all challenges that online education needs to face.

1.4. Impact on teaching arrangements

The outbreak of COVID-19 has disrupted the existing educational order. How to balance the prevention and control of COVID-19 with students' academic performance and make reasonable overall arrangements is a severe test of the response ability of the education department. First of all, the constant changes in COVID-19 situation, the differences in various regions, and the differences in the specific conditions of each school have made the determination of the school start date more complicated. Secondly, due to changes in conditions, it is not advisable to completely copy the time and content of classroom teaching. How to make adjustments is a problem that education departments need to consider. In addition, due to the long duration of COVID-19 and many changes, how to enable teachers and students to adjust to the new semester as soon as possible after the start of school is also a problem. Finally, different regions are affected by COVID-19

and their response measures are different. How to ensure the fairness and fairness of the assessment, especially the fairness of the entrance examination, needs to be carefully considered.

2. Responses to teaching problems under COVID-19

On February 4, 2020, the Ministry of Education issued the "Guiding Opinions on the Organization and Management of Online Teaching in Ordinary Colleges and Universities During the Period of COVID-19 Prevention and Control by the Work Leading Group Office Response to COVID-19". Guiding opinions were put forward for teaching work [11]. On the 12th of the same month, the General Office of the Ministry of Education and the General Office of the Ministry of Industry and Information Technology issued the "Notice on the Work Arrangements for "Suspension of Classes without Suspension" during the Postponement of Primary and Secondary Schools", which deployed the teaching arrangements for primary and secondary schools [12]. To some extent, COVID-19 is like an unannounced test, which poses many challenging problems for us, and tests the resilience of the education system. How should we respond to achieve opportunities in crisis and bring COVID-19 to life? The negative impact of the coming is minimized, even as a rare teaching experience, so that students and educators can grow through the experience?

2.1. Strengthen life health and ideological and moral education

The new crown pneumonia epidemic has brought us painful harm, but it also provided a precious opportunity for life and health and ideological and moral education. During COVID-19, the students stayed in isolation at home and realized the danger of the disease firsthand. During this period, the popularization of epidemic prevention and hygiene knowledge through online education may have a better effect. Teachers can help students understand the transmission principles and protective measures of some infectious diseases, not only can reduce the risk of students contracting new coronary pneumonia, but also lay a foundation for the prevention of other diseases. In addition, students should be made aware that the source of many diseases comes from nature. Most of them are caused by human beings' excessive squeeze of nature and disrespect for plant and animal life. Therefore, students should be taught to fear life and It is very necessary to respect nature, love animals, and live in harmony with nature. In addition, propaganda about "wearing masks, washing hands frequently, and ventilating more frequently" during COVID-19 has also made most students realize the importance of hygiene issues. At this time, they should seize the opportunity to popularize hygiene knowledge and help students develop good health. Hygiene habits.

In addition, in this fight against COVID-19, some people chose to stand up, some chose to give silently, but at the same time some people chose to escape. Through these behaviors, the students felt the character gap between people, and many doctors, police, volunteers and other frontline workers died in this epidemic. They used their lives to fend off the virus for us. Teachers can pass The advanced deeds during COVID-19 period will be combined with the fine traditions of the Chinese nation, and students will be given moral education. Through examples, students will be guided to learn the spirit of integrity, benevolence, fear of difficulties, and selfless dedication of advanced figures, and enhance students' sense of social responsibility and dedication. The spirit of dedication must also cultivate students' gratitude towards society and the country and help them form correct values. In addition, during COVID-19 period, most parents of students also need to conduct home isolation for a certain period of time, which increases the time spent with students. This is a rare opportunity for family education. Schools can appropriately cooperate with parents for family education. For example, teaching children to do housework properly can cultivate children's sense of family responsibility and self-care ability; sharing experiences in life can enhance family affection, which not only enables parents to better understand the growth status of students, but also enables students to better understand the hardships of their parents' work and The kindness to nurture yourself.

2.2. Reasonably arrange physical education courses

During the home isolation period, most students exercise less, which is not conducive to the improvement of immunity and growth and development. Therefore, online physical education courses should be opened to help students exercise regularly, enhance their own quality, and maintain a good

physical condition to resist the invasion of diseases. Online sports courses can be conducted through live broadcast and video recording. In the process of live broadcast, the teacher can interact with the students, which can play a certain supervision role, and can also correct the irregularities of the students' movements to facilitate the students to adjust in time. In the recorded courses, teachers can give targeted demonstrations and key points to explain some important or difficult actions, and students can better understand them by playing them repeatedly.

It should be noted that the content, form and arrangement of online physical education courses need to be adjusted differently according to the age of the teaching object. In addition, it is necessary to pay attention to the operability and adaptability of online physical education courses, try to avoid students from doing intense exercise at home, and the main purpose should be to keep fit and develop good living habits. For example, rope skipping, swimming, long jump, running and other sports in the traditional school physical education curriculum should be minimized or avoided. Rhythmic aerobics, sit-ups, push-ups and other sports are suitable to exercise your body and reduce the risk to others. influences. In addition, in view of the increased risk of students' vision loss during home isolation, it is necessary to standardize and control the posture and duration of students using electronic devices. Students should also be urged to perform regular eye exercises and other eye care at home to relieve eye fatigue. Prevent damage to eyesight.

2.3. Pay attention to the psychological state of students

Faced with the sudden new crown epidemic, the originally peaceful and orderly life is broken, and many students will have psychological fluctuations, and severe cases may even cause mental illness. Therefore, the education department should regularly organize online psychological counseling activities to explain the psychological problems that may occur during COVID-19 and how to deal with it, help students to self-regulate, and guide students to pay attention to COVID-19, while also being able to relieve themselves and relieve stress. Way to relieve negative emotions. Competent departments can open a professional public welfare psychological consultation platform to provide students with more effective psychological assistance.

Teachers should also communicate with students on a regular basis to understand the psychological state of each student in a timely manner, and conduct guidance based on the actual situation. If necessary, they should contact parents in time to find effective solutions to help students relieve their psychological pressure. Especially for students who have been diagnosed or suspected of being ill by themselves or their relatives and friends, they should become the focus of psychological counseling to help them maintain a stable psychological state. However, if students have serious psychological problems that teachers and parents cannot solve, they should contact a professional psychological counselor as soon as possible to conduct diagnosis, treatment and rehabilitation for them, and jointly help students get out of their difficulties as soon as possible, even after COVID-19 is over. Take proper care to avoid long-term psychological trauma.

In addition, teachers and parents should take into account the students' usual performance and make strategies based on the students' usual performance in order to deal with the problems of students' lax state and lack of concentration during home study. If the students are in a poor state while studying at school, they can take this opportunity to encourage them academically with the assistance of their parents, and carry out appropriate intervention and supervision when necessary to change students' attitudes towards learning. If students usually perform well, they need to focus on environmental factors. For example, the study area and the rest area should be physically separated as much as possible, and the study area should be as clean and bright as possible, while reducing external interference, increasing the sense of ritual during learning, and striving to create a Classroom environment" helps students adapt to online learning and find their learning status.

2.4. Improve the level of education informatization

The lack of informatization has seriously hindered the development of online education in China. The

information technology literacy of some teachers and students still needs to be improved, and the construction of education informatization still needs to be strengthened. Teachers should regard online teaching during COVID-19 as an opportunity to improve their information technology level in practice, actively learn software operations and simple troubleshooting methods that may be used in the teaching process, and frequently update their educational skills to improve Only with its own hard power can teaching efficiency and quality be effectively improved, and new ideas and knowledge can be better communicated to students.

At the same time, online teaching during COVID-19 also provides students with an opportunity to learn about information technology. Teachers can explain the role of information technology in fighting COVID-19 and other major events, so that students can experience more vividly and profoundly. The power of science and technology generates enthusiasm for learning, and it should encourage students to explore new technologies and thirst for knowledge. In addition, teachers should emphasize the current problems of false information, spam, and bad information on the Internet, teach students the ability to distinguish the authenticity of information and information collection, and guide students to resist bad information. It is worth noting that students spend more time in contact with electronic devices during home study, and it is easier to improve the level of information technology in practice, but at the same time, the principle of moderation should be followed and not over indulged.

For the education sector, some of the previously established education platforms did not play an important role in this epidemic. Instead, software developed by technology companies such as Tencent Classroom, DingTalk, and ZOOM dominate. Therefore, in the process of education informatization, the education department should actively develop cooperation with technology enterprises and strive to complement each other's advantages in order to more effectively improve the level of education informatization in China.

However, the hardware equipment in some areas of China has not yet reached the level of sufficient online education. For such students, schools should cooperate with local governments and operators to meet the teaching needs as much as possible, such as temporarily providing learning equipment and short-term targeted traffic or conducting TV teaching, etc. In addition, teachers should implement "one person, one policy" for such students, provide targeted regular tutoring, and help them arrange their study plans. And after the start of school, focus on checking the deficiencies of such students, making up the learning progress in time, and ensuring the fairness of teaching.

2.5. Flexible change of teaching mode

Relying on online education, most areas in China have basically realized "stopping classes without stopping school" during COVID-19. However, this sudden change in form makes us need to base on the actual situation and combine the characteristics of online education to give full play to its unique advantages. Maximize the teaching effect. First of all, taking advantage of the resource-sharing feature of online education, teachers can work together through collective teaching and research, and conduct joint teaching based on what they are best at, creating a better quality online course, and it can also ensure that they are not "advanced teaching". Under the premise, the proper addition of famous teachers to teach can not only improve the quality of teaching, but also relieve the pressure of teaching. Secondly, online education has flexibility in scheduling. Teachers can arrange teaching time according to the specific situation of the class, helping students to form a good schedule of work and rest and time management skills. In addition, the interactive methods of online education and traditional education are quite different. Teachers can get closer to the students through such methods as emoticons, buzzwords, and showing each other's living conditions to form a good learning atmosphere. And this kind of interaction also helps students to have more flexible group communication, which is conducive to improving students' communication and cooperation skills. At the same time, in the process of online education, the text, voice and other information passed between teachers and students can be directly recorded, combined with the powerful data processing capabilities of

computers or mobile phones, making it more convenient for teachers to conduct teaching and assessment management Fast. In addition, online education improves the possibility of individualized cultivation of students. Students can choose online courses according to their own hobbies and learning progress, which helps cultivate students' interest in learning, enhance their ability to learn independently, and improve learning efficiency. It is also helpful for students to form long-term goals and achieve targeted learning, which is of great benefit to students' long-term development.

2.6. Be prepared to return to school

COVID-19 is fierce, but it will eventually retreat. How to prepare for returning to school is an important issue that needs to be faced at the end of epidemic prevention and control. The most important task is to ensure the health and safety of teachers and students. The education department should formulate a resumption plan before returning to school, start school in batches and regions, and monitor the health of all faculty, staff and students before the start of school to ensure that teachers and students will not return to school with illness. In addition, schools should prepare adequate protective necessities, such as masks, thermometers, disinfection supplies, etc. At the same time, the school should carry out strict disinfection and cleaning of all corners of the campus to ensure the hygiene of the work and learning environment of teachers and students, and ensure regular disinfection and opening windows for ventilation after school starts. And when COVID-19 has not been completely eliminated, eliminate or reduce unnecessary collective activities, and implement measures such as batch meals and scattered activities between classes. And also strengthen students' awareness of hygiene and safety, and guide them to wash their hands frequently, pay attention to personal hygiene, and not go to crowded places. Relevant departments should also conduct meticulous inspections with the strictest standards, try their best to eliminate the risk of COVID-19, and resolutely prevent COVID-19 from spreading to schools.

In addition, the recovery of the state after COVID-19 is also a problem that teachers and students need to face together. The school can evaluate the learning situation of students after the beginning of the school, fully understand the learning progress of each student at home, and formulate teaching arrangements based on the evaluation results, and provide targeted guidance to students who are slower in progress. Cohesion of semester course knowledge. In addition, due to the extension of the holidays, the adjustment and recovery of students' learning status has increased difficulties. Therefore, it is necessary to pay more attention to gradual and orderly progress in teaching, and try to avoid excessive pressure on students in order to keep up with the progress. In addition, COVID-19 will inevitably bring some psychological pressure to students. Schools should guide students to avoid excessive worries about COVID-19 under the premise of personal protection, and pay attention to the psychological state of students, and promptly communicate and intervene if they find abnormalities. To ensure the mental health of students.

3. Conclusion

It is true that COVID-19 has brought a lot of inconveniences and exposed some shortcomings in Chinese existing education system. However, through the implementation of this large-scale online education, we have deeply realized its huge potential and forced the development of online education in China. It has provided educators with an opportunity to re-examine traditional education and compare traditional education in practice. The advantages and disadvantages of education and online education will also provide valuable experience for the future development of the "offline + online" education model.

COVID-19 has also brought some enlightenment to the future development of teaching. Since online education is open, there is no clear course outline for its teaching content, and the main body of providing teaching services is not limited to school teachers. Numerous training institutions, even every individual, are able to set up an online course or conduct a webcast on the Internet. Such diversified courses not only give students more room for choice, but at the same time, due to the uneven teaching level, it further increases the difficulty of choice. Therefore, in the future study, students' autonomy will be greatly enhanced, which is conducive to the cultivation of students' individualization, but also increases the requirements for their

autonomy and information discrimination ability. And for teachers, the acceleration of information iteration and the continuous changes in student needs have also increased the teaching pressure of teachers and raised the requirements for teachers' innovative ability. With the advancement of science and technology, the combination of big data, 5G, artificial intelligence, virtual reality and other technologies with education will enable online teaching to have a more advanced and flexible teaching experience, and will also bring greater impact to traditional teaching models .

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