# **Innovation and Reform of School Teaching Model Based on Epidemic Research**

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Abstract: The sudden outbreak of the epidemic has affected many original plans. During the period of epidemic prevention and control, the start of school was postponed and the school could not resume school. The education of students was greatly affected. Online education was facing a huge test. The innovation of school teaching mode And reforms require us to pay more attention. During the epidemic prevention and control period, in order to ensure the steady progress of education and teaching, the concept of "stopping classes without stopping school" was proposed, and a round of innovation and reform of new teaching models emerged. The importance of online education has been increased. The opening of the school online education model shows the necessity of online education for overall education. From the perspective of the development of online education in schools, it provides support for the long-term development of schools and students, and provides support for online education. Educational innovation and reform provide assistance. education has a certain degree of comprehensiveness and stability. It is a good educational auxiliary tool. How to make online education play its greatest value in comprehensive education and become the most effective supplement requires continuous practice by school educators and researchers, Constantly try new methods, constantly innovate and reform, make online education mature and integrate with school education, and improve the overall height of education.

### 1. Introduction

In the context of the epidemic, from the perspectives of schools and students, the progress of online education has become inevitable. Through the analysis of both students and schools, the necessary support for the promotion of online education is summarized, and teaching innovation is promoted in special times .

(1)Guarantee the basic requirements of school teaching

In the context of epidemic prevention and control, schools cannot resume classes. Delayed opening of classes is a guarantee for the safety of students and teachers, and online courses have become the main choice for courses. In order to avoid the impact of the suspension of classes on children's learning and course progress during the epidemic, all primary and secondary schools have fully implemented online teaching, encouraging teachers to conduct "online lessons" at home to ensure that children can complete the course progress and teaching tasks at the same time.

(2) Meet the normal learning requirements of students

Learning is what the students desire, but during the epidemic prevention and control period, the children are at home and cannot go out, but the heart of going to school is constantly restless, they are eager to return to campus and start campus life. Being at home for a long time and not being able to go out, the psychological pressure of students is high and they are prone to negative psychology. The emergence of online course teaching methods has largely solved this problem. In the classroom, the teacher carefully explained the knowledge points, and the students answered the questions actively and actively, followed the teacher's ideas closely, and cooperated with the teacher to complete the online course and promote the online education and teaching. In the course of the class, the students are happy and open minded, and the teacher is also summing up experience in the teaching, adjusting the teaching plan, so that the students are as fulfilling as they are on campus every day.

(3) The difference between online education and traditional education

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The epidemic has pushed online education to the forefront. Not only is online education not affected by space and weather, but also solves the problem of the advantages and disadvantages of educational resources caused by regions. Can online education really replace traditional education? This issue has caused widespread concern. Table 1 shows the comparison between online education and traditional education.

Table 1 Comparison of Online Education and Traditional Education

| mode             | Main features | Resource form            | advantage              |                          |
|------------------|---------------|--------------------------|------------------------|--------------------------|
|                  |               |                          |                        | Disadvantage             |
| Online education | Online        | Electronic teaching      | Personalization and    |                          |
|                  | teaching      | materials, live courses  | autonomy               | Anxiety, student control |
|                  |               |                          |                        | problems                 |
|                  |               | Paper teaching materials |                        |                          |
| Traditional      | Class         |                          | Interact with students | Boring, teacher-oriented |
| education        | Teaching      |                          |                        |                          |

The main difference between online education and traditional education is online teaching and face-to-face teaching in classes, and the different forms of resources also have a great impact on the curriculum. Table 2 is a comparative analysis of different resource forms.

Table 2 Comparative Analysis Of Teaching Aids between Paper and Electronic Textbooks

| Resource form                                 | advantage                           | Disadvantage                      |                               |
|---|-------------------------------------|-----------------------------------|-------------------------------|
|   |                                     |                                   | Tool recommendation           |
| Paper teaching materials                      | Easy to read and visualize          | Inconvenient to carry and buy     | School, bookstore, etc.       |
| Electronic teaching materials, live broadcast | Personalization, high-level control | Disadvantages are easy to magnify | Courses on each live platform |

### 2. Innovative Reform Strategies for Online Education in the Context of the Epidemic

During the epidemic prevention and control period, online video courses and live broadcast courses have become a new hybrid teaching model that is constantly being promoted. The difference between this model and the past is not a mixture of offline courses and online courses, but a two-way mixture of online courses. There is no offline face-to-face interaction and communication, only online communication, which is both for teachers and students. A new challenge and innovation. In the process of implementing online education in schools, in order to ensure the maximum absorption efficiency of children in class, teachers need to continuously optimize, enrich and innovate the content of the curriculum, and make plans for the overall arrangement before, during and after class to ensure teaching Quality, to avoid negative effects after the online course is launched [1].

### (1) Preparation before class

Unlike campus classroom teaching, online teaching teachers have no practice. Teachers need to be proficient in class equipment before class. How to enter the live broadcast room and listen to the class requires teacher guidance. How to play class materials on the live broadcast platform, and the children's pictures and sounds during the playback process Whether it is clear or not, the teacher will consider as many possible problems as possible before the class, which is related to the effectiveness and implementation of the students' class. For students, it is necessary to download the viewing device in advance, log in to the device, modify the remarks name, and prepare the materials required for the course of the day to ensure the smooth completion of the course and achieve the best course effect.

### (2) Innovative reform of class content

In the context of the epidemic, the overall model of online courses has been innovated. First, the

content of the class is sent to the students by means of short videos. According to the teaching content and learning materials, the teacher records short videos as teaching resources and transmits them to the students through QQ and WeChat social software. The students should have a certain understanding of the knowledge points of learning. , Do pre-class preparations to prevent students from finding the key points in class. Second, the in-depth discussion between teachers and students during the live teaching process. The live course teacher and students learn face to face, focusing on short video teaching content. Before class, children will conduct self-preparation based on the short video sent by the teacher to find the key to the lesson. Points and difficulties, in-depth exploration of teaching content with the teacher in the live course, focusing on key points and key points to ensure the overall efficiency of the classroom.

### (3) Arrangement of after-school tasks

The arrangement of after-school tasks after the online course is over is very important. Unlike classroom teaching, the teacher cannot detect the child's completion status and completion, and whether he uses other auxiliary tools to complete the exercise, the teacher cannot grasp the detailed information. The next step arrangement of the teacher's course and the completion of course tasks will be affected. To this end, the more complete solution proposed is that parents and teachers work closely together, teachers teach knowledge points, and parents play a supervisory role to improve student autonomy, allowing students to complete the tasks left by teachers independently and efficiently. In this process, the students can feedback to the teacher at any time for the difficulties encountered by the students, and the teacher can help the children to answer through online communication, so that the children have a better learning experience [2].

### 3. Challenges and Difficulties Faced by Online Teaching

### (1) Problems in class facilities

There will be problems in the access of the webcast platform, teacher end, and student end of the class. The live broadcast room is created, and you need to connect or QR code to enter. In the early stage, you need to communicate with parents to download the software. In the course of the class, too many people are online, which causes the network to be unstable, the system freezes, and students cannot enter the live broadcast room, thus affecting the effect of the class.

### (2) Control of teaching time

In the course of class, the interaction between teachers and students takes part of the time, especially in large classes. The teacher has been in a state of high pressure for a long time, and the eyes will spend a long time on the screen, which is easy to fatigue and pain, which affects the state of the teacher in class. For students, attending classes online during childbirth will gradually reduce their listening status and interest in listening, which will affect the quality of listening.

### (3) Classroom order

For students, facing the computer or mobile phone, they cannot concentrate for a long time. The focus of online teaching quality is whether the students' self-learning ability and self-discipline meet the standards. How to make students earnestly complete online teaching is a very important issue. Many students sit in front of the live class to complete other things, do not actively interact, and are not studying online. Teachers cannot supervise the students' listening to the class. Students with poor self-discipline can hardly guarantee the effectiveness of the class [3].

## 4. Suggestions for Online Teaching

Choose excellent teacher research programs in the school, formulate reasonable procedures, provide teaching services, provide resources, equipment, training, etc., to reduce the pressure of teachers' work. Teachers pay more attention to students' class status, communicate and communicate with parents every day to ensure that children are not left behind. Students adjust their mental state and learning style, self-preparation, active learning, diligent exercise, work-rest combination to ensure physical and mental health.

### 5. Conclusion

In the context of the epidemic, online education has become the main teaching model, and it is also facing huge challenges when it is further implemented. How to make the value of online education fully manifest and highlight its maximum effectiveness is the current focus of innovation and reform. The content before, during and after class is constantly updated to build a solid barrier for the implementation of online education.

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