The Status Quo and Improvement Strategies of Online Teaching Quality Management in the New Situation

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Abstract: During the epidemic, in order to ensure the safety of teachers and students and ensure the progress of teaching, all schools have launched online teaching to meet the learning needs of students at home. At the same time, this method has realized that teachers can give lectures when they are not at school, and students can listen to lectures when they are not at school. This paper analyzes the characteristics and status quo of online teaching, and puts forward the method design and organization and implementation strategy of online teaching, so as to provide references for online teaching teachers.

1. Introduction
In order to minimize the impact of the epidemic, the General Office of the Ministry of Education and the General Office of the Ministry of Industry and Information Technology jointly issued on February 12, 2020 the "Notice on Work Arrangements for "Online Classes" During the Postponement of Primary and Secondary Schools". During the epidemic prevention and control period, we are responsible for the lives, health and safety of all teachers and students. Under the planning of this policy, schools in various regions have acted quickly to carry out various online teaching activities such as live teaching, recorded video teaching, online tutoring and answering questions according to their own conditions. Online teaching has quickly become a key support for achieving goals. The large-scale, long-term online teaching under the epidemic situation on the one hand reflects the important value of education informatization, and on the other hand, it also tests the early development results of education informatization.

On the whole, my country’s education informatization has achieved remarkable results through the rapid development of the early stage, and has made important contributions to support this goal. But at the same time, some problems have been exposed, mainly reflected in the lack of information infrastructure in rural and remote areas, insufficient supply of digital education resources, and the level of information literacy of teachers and students to be improved. This article attempts to analyze and sort out some of the problems exposed in achieving this goal from the perspective of teacher and student information literacy, and propose solutions.

2. The design of online teaching
The teaching design of online teaching is different from that of traditional classrooms. Online teaching should consider various possible advantages and disadvantages under the new model. Therefore, when designing teaching, we must combine the characteristics of online teaching and focus on the following aspects.

3. Step by step, expand space
The basic process of online teaching usually consists of two parts: online teaching and expanded online teaching, as shown in Figure 1.

Conventional online teaching can generally be completed in three steps: complete pre-class guidance by pushing learning tasks and learning resources; conducting intensive lectures through live broadcast; completing after-school homework through functions such as discussion area and homework submission. When the network is good, you can use video to explain online. When the network is not good, you can use audio to explain. The teacher’s explanation is generally controlled within 15-20 minutes. The other time is left for students to study independently. The teacher can answer questions online, conduct discussions or other Activities. This is the conventional online teaching method that teachers will adopt at present, and basically it can complete the teaching task.

4. Choose a platform, forming teaching methods
At present, the commonly used teaching platforms mainly include Chaoxing Xuetong, Yu Class, DingTalk, Tencent Class, CCTALK, UMU, CLASSIN and so on. From a functional point of view, they are all similar, as shown in Figure 2, which basically...
meets the requirements of users. Choose the required teaching platform mainly according to the needs of users and usage habits. From an operational point of view, current platforms all follow the "KISS (Keep It Simple, Stupid)" principle, which is the principle of simplification of operation. Basically, they are humanized and visible operations, so there is no problem in operation. The more productized and the more people use the platform, the functions will be better and relatively stable. Of course, the more people who use it, the more serious the network lag will be, so it must be considered comprehensively, mainly depending on the adaptability of teachers and students. After we have selected the platform, we will match the commonly used functional models and gradually form our own unique teaching methods.

It is best for each school to unify the platform used and then conduct online teaching, so that it is convenient to carry out teaching seminars, lectures, evaluations and other activities, including business communication with platform companies, so don’t use too many types. In addition, in the process of using the platform for teaching, pay special attention to the application of the teaching management platform. For example, you want to know how many students are involved in learning. Some platforms do not have this statistical function, and teachers need to handle it manually. This will increase a lot of transactional operations, so if it is used for a long time, teachers must have the awareness of integrating the teaching management platform in order to record data procedurally and conduct overall evaluation.

5. Self-study materials, carefully designed

Self-study materials are not equal to micro-classes, which can be part of the self-study materials. A complete self-study material should include at least the following aspects: firstly, conduct self-study guidance in the form of a study list or task list; secondly, explain content through micro-classes and reading materials; finally, evaluate effectiveness through test questions and evaluation requirements. Therefore, teachers can be flexible and diversified when designing self-study materials, but the above content must be involved. The effectiveness of students’ learning is directly related to the effectiveness of self-study materials. In addition, when preparing self-study materials, we must pay attention to the situation of students and pay attention to the issue of education fairness. For example, when students have difficulty watching videos at home, teachers should consider providing audio or text plus pictures. We should ensure that all the staff can participate in the teaching process.

6. Problems in online teaching

First, the conditions for online teaching in rural areas are insufficient. Through interviews, it is found that most students in urban schools can use terminal devices such as tablets, laptops, and desktop computers to participate in online learning. However, most rural areas have insufficient support conditions for online learning. On the one hand, rural network conditions are poor. Most families lack learning tools such as tablets and desktop computers. Students can only use their parents’ mobile phones to watch. On the other hand, this is limited by the students’ own cognitive range. Some parents will not operate the online teaching APP on their mobile phones, and the application functions of some live classroom software on mobile phones have certain restrictions, which prevents students from participating in the school smoothly. Organized online teaching.

Second, the information awareness and skills of teachers and students need to be improved. First, some teachers are unacceptable and unaccustomed to online teaching. At the same time, they lack knowledge about the use of existing online teaching software, making it difficult to successfully carry out online teaching activities supported by information technology; Unfamiliar and lack of effective online teaching strategies, it is difficult to control classroom discipline, and some online classrooms once appeared chaotic; third, some students have low acceptance of online teaching, which is not only due to the appropriateness of the curriculum, Also due to the lack of familiar teachers’ intervention in the video courses, resulting in insufficient restraint and sense of presence, it is inevitable to produce resistance and coping mentality; fourth, most students prefer to directly ask teachers and parents when encountering problems, and use network resources The awareness of taking the initiative to carry out independent learning and solving problems is relatively weak.

Third, the effect of online interaction between teachers and students needs to be improved. Through interviews with teachers.
and students, it is found that most of the teacher-student interaction experience in online teaching still needs to be improved, mainly for four reasons: First, due to the existence of large-scale and simultaneous online live teaching, the network is congested by tides, which is very important for teachers and students. Interaction has adverse effects. The proportion of live classrooms should be appropriately reduced, emphasizing equal emphasis on synchronization and asynchrony, and promoting the diversification of teaching modes. Second, in terms of teaching methods, some teachers mainly use PPT courseware to carry out single-form lecture teaching for students. There is less time for student-student interaction, and more attention should be paid to learning-oriented, diversified interaction, and diversification of resource types and teaching methods; third, some students have weak self-control ability, absenteeism and non-handing of homework, etc., and the timeliness of teacher-student interaction, Effectiveness brings adverse effects, and the teaching order control method and student evaluation mechanism in the online context should be further improved. Fourth, home-school cooperation needs to be further strengthened.

7. Improving strategies and focus points under the current situation

In the current situation, in order to promote the smooth development of online teaching, we should focus on the following aspects in view of the problems in the online teaching process: First, build an online teaching support service system and pay attention to the development of online teaching in weak schools. On the one hand, schools and educational administrative departments should take the overall situation into consideration, combine the school’s current educational resources, student characteristics, teacher abilities and other factors to manage informatization leadership, teaching operation and management mechanisms, teacher training service models, and technical support capabilities. Let’s work together to ensure the smooth development of online teaching activities. On the other hand, it is necessary to establish an online teaching resource evaluation mechanism to supervise the quality of online teaching curriculum resources in terms of teacher qualifications, course content, and teaching methods. It is necessary to dig out excellent and typical online teaching cases from the front line of teaching to cultivate excellent online teaching Seed teacher. At the same time, we must focus on the development of online teaching in weak rural schools. On the one hand, the government, schools, and enterprises should work together to solve the practical difficulties of insufficient information teaching conditions such as teacher and student networks, terminals, and tools in rural weak schools; on the other hand, For families of students with online learning difficulties, schools and education administrators can provide parents with appropriate online teaching tool installation and use training through the Internet, telephone, etc., and guide them to provide services and assistance for students’ home learning. Second, carry out online teacher training to strengthen collaborative teaching and research. Previously, most teachers were familiar with information-based teaching in the classroom, or partly extended to online mixed teaching, and rarely carried out pure online teaching where teachers and students were separated. The online teaching method is not the best way to achieve effective teaching, but it is the only option at the moment. In the new teaching scene, the problem of insufficient teachers’ ability is fully exposed. Therefore, it is particularly necessary to carry out online teacher training and strengthen collaborative teaching and research.

8. Conclusion

In short, online teaching during the epidemic prevention and control period is a major test of the information literacy of teachers and students. It is a concentrated display of the achievements of education informatization in recent years and a practical test of the level of education informatization support teams in various regions. The level of information literacy of teachers and students is a key element for the successful development of education and teaching activities in an informationized environment. Our changes have an important supporting role in comprehensively promoting the integration of information technology and education. In the context of education informatization 2.0, we must take the initiative to seize opportunities, meet challenges, attach importance to the improvement of teachers and students’ information literacy, promote teachers and students to actively adapt to the educational and teaching reform trend of the information age and intelligent age, and uphold the depth of information technology and education. Integrate development concepts, take education informatization as the starting point, and comprehensively promote education modernization.

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