A Study on the Transformation of College Teaching Mode in the Post-Epidemic Era

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Abstract: In the post-epidemic era, the teaching organization of colleges has changed, and online teaching has ushered in development opportunities, but also faces huge challenges. Promoting the comprehensive integration of "online + offline" teaching will become the focus of the future development of colleges and universities. According to the necessity of the transformation of college teaching mode and the characteristics of the implementation of college online teaching, this paper puts forward the transformation of college teaching mode under the new situation.

1.   Introduction

With the rise and rapid development of Internet technology, online teaching based on the application of this technology has gradually attracted people's attention, and has become a hot new education industry [1]. Online teaching in China started in the middle of 2000 and developed rapidly. In March 2003, the Ministry of Education officially put forward the three-year master plan on the construction of "Teaching quality and teaching reform project of colleges and universities", which marked the formal opening of the construction of high-quality special work in Chinese colleges and universities [2]. However, online teaching in this stage of development is dominated by video presentation, which is a unilateral transmission of knowledge. In 2010, China's online teaching market, influenced by the rapid development of foreign online teaching, entered the golden age, leading to a new round of education reform [3]. Looking at the present, the demand for online teaching in China is very strong, and the fields involved are constantly transitioning from vocational training to school education, but the problems such as heavy resources, light interaction, heavy autonomy, light guidance can not be ignored [4].

The sudden COVID-19 epidemic has brought profound changes to the field of higher education, and has also brought new opportunities and space for the development of online teaching. In order to effectively stop the threat posed by the epidemic to colleges, teachers and students, the Ministry of Education officially announced the organization and deployment of comprehensive prevention and control work in the education system from January 21, 2020. On February 5, the Ministry of Education officially approved and issued the Guiding Opinions on the Organization and Management of Online Teaching in Ordinary Colleges during the Epidemic Prevention and Control Period. Education departments at all levels, in accordance with the requirements of superior documents, encourage major colleges and universities to change their teaching ideas, promote the reform of learning methods, and complete the transfer and integration of offline teaching to online teaching [5]. Since then, colleges and universities across the country have organized online teaching activities, opening up a new road for "teaching" and "learning".

But some new questions have also emerged along with this scene: Can industries such as higher education, which have strong requirements for professionalism, achieve the same offline and online knowledge transmission, to achieve the same effect? How to operate online teaching during the epidemic, and how to investigate the characteristics and interaction of various elements? Both need to make breakthroughs in the field of education [6]. Based on the existing research basis, a holistic framework that fits the reality can be built with the help of the communication mode theory, and online teaching can be regarded as a complete knowledge transmission activity. The subject, object, channel, content and communication effect are analyzed and explained respectively, and countermeasures and suggestions are put forward for the development of online teaching in colleges and universities in the post-epidemic era, so as to promote the deep integration of "offline + online" education.

2. The Necessity of the Transformation of College Teaching Mode in the Post-Epidemic Era

2.1. The Normalization of Online Education Will Become an Inevitable Trend

Driven by emerging information technology, the integration of online and offline education has become the main feature of the new stage of contemporary education informatization [7]. On the one hand, online teaching breaks the time and space restrictions of traditional classrooms, providing convenience for cross-regional learning, long-distance communication and personalized teaching. On the other hand, it also greatly improves the informatization teaching level of college teachers. It will also further promote the improvement of students' autonomous learning ability, so as to effectively improve the quality of teaching. It can be said that online education is the inevitable trend of "Internet + education".

2.2. The Social Demand of "Learning Revolution" to Promote "Quality Revolution"

The traditional offline teaching model can no longer adapt to the development and changes of The Times, and online teaching combined with modern information technology has become an important development direction of China's higher education [8]. Online teaching can promote the equality and quality of education, and the online teaching model represented by micro-courses, MOOC, flipped classroom, etc., has emerged and become practical. On the one hand, online teaching is conducive to realizing personalized learning, sharing high-quality course resources, and expanding the coverage of high-quality education resources. On the other hand, the integration of online and offline teaching has also greatly promoted students' independent and cooperative

learning, created conditions for the reform of traditional teaching mode, and can solidly promote the "quality revolution" of higher education talent training.

3. The Characteristics and Challenges of Online Teaching Mode

3.1. The Characteristics of Online Teaching Mode

(1) Online teaching has become the main form of teaching

Although Chinese colleges and universities have been actively promoting the process of education modernization, such as MOOCs, Erya courses, etc., online teaching has always been a supplement to offline classroom teaching, and its rich teaching resources and teaching effects have not been effectively explored. Under the new situation, online teaching has been pushed down the front line of teaching, and the teaching mode has undergone fundamental changes. For the first time in the history of education, online teaching has been used and carried out on such a large scale, and its teaching concepts and concepts have been widely popularized and promoted among teachers and students, completely replacing traditional classroom teaching during this period [9]. And it will also become an important teaching form in higher education in the future.

(2) Diversified online teaching methods and flexible teaching program design

During online teaching, in order to ensure teaching quality and strengthen teaching management, universities give full play to the advantages of various information technology platforms, including but not limited to Super Star Learning, China MOOC University, Tencent Class, wechat platform and other platforms. During online teaching, in addition to video playing and live teaching, many of them also add rich online teaching methods such as case discussion and homework rush answer. Compared with traditional offline teaching, the online teaching chain is more complete and rich [10]. In addition, according to different majors, disciplines and different teaching contents, the design of teaching programs is more flexible, the teaching time of each class can be adjusted appropriately, and the assessment method is more flexible and diversified.

3.2. The Challenges of Online Teaching Mode

(1) It is difficult to change teaching ideas in a short period of time

In the early stage, colleges and universities developed online teaching plans in accordance with the requirements, and teachers were pushed to the front line of online teaching, but most of them were not mentally prepared. Faced with new teaching tasks, time was tight and the task was heavy, and it was difficult to adapt to them in a rush. Although they were actively prepared, they needed to double their energy and the effect was unknown, which directly led to the fear and resistance of some teaching staff. I still hope to return to offline classroom teaching to avoid affecting the quality of teaching.

(2) Limitations of technical support and uncontrollability of learning environment

The direct challenge of network teaching is the dependence on teaching platform and network technical support. At present, although the more well-known online platform in China has been promoted and popularized for several years, it has experienced an explosive growth in the number of users in the same period of time in the initial stage of use, which has caused the teaching platform to be overwhelmed, and the network teaching has been hindered by delays, such as delays, and delays. Moreover, unlike traditional offline teaching, online teaching is an "unmanned classroom" in a sense, during which teachers cannot control the school's class performance, such as students' expression, demeanor and participation in class, and cannot timely understand students' learning status and knowledge acquisition, which also affects the teaching effect to a certain extent.

(3) Teachers' ability to apply information technology is uneven

Compared with traditional offline teaching, the environment, mode, teaching process design and student management of network teaching have undergone significant changes. There are still obvious differences in the application ability of information technology between disciplines and between young and old teachers. Some teachers are not used to or familiar with the use of online teaching software, and various accidents often occur in the teaching process. Therefore, there are still many challenges and difficulties in the full implementation of online teaching.

(4) Challenges to students' learning management difficulty and independent learning ability

Due to the different online teaching platforms or teaching methods adopted by different teaching staff, students need to switch and adapt frequently when using them, and students' learning pressure is increased. In addition, in the home network learning environment, the difficulty of students' independent learning and self-management is increased. Because of the complexity of people, they show great differences in learning motivation, learning habits and learning consciousness, and students are easy to appear a superficial learning illusion, resulting in slack learning and difficult to guarantee the teaching effect.

4.   The Transformation of College Teaching Mode in the Post-Epidemic era

As mentioned above, the large-scale online teaching practice of colleges and universities in the country makes us firmly adhere to the advantages highlighted by "Internet + intelligence + education". The comprehensive integration of modern information technology in the teaching process has changed the original normal state of education, and made it a reality that "everyone, everywhere and always" can learn. Therefore, in the new situation, China's higher education should follow the "online + offline" comprehensive integration, learn from each other, dual track parallel in the teaching mode transformation.

4.1.   Accelerate the Reform and Innovation of Classroom Teaching Mode

Carrying out online teaching does not mean to give up offline teaching, but should gradually integrate online teaching into teaching, increase the development of online teaching hardware and software, and combine the actual teaching situation to organically integrate "online + offline", give full play to the advantages of both, and effectively improve teaching efficiency and teaching level. In this process, teachers should first actively guide the concepts of teaching and learning of teachers and students. Teaching staff should clearly understand that online teaching is not a rigid copy of offline teaching, but a more scientific and reasonable design of teaching mode according to the principle of maximizing teaching effect. In the process of teaching practice, we should follow the application of knowledge to solve practical problems as the driving force, turn the traditional teaching focus on the teacher's "teaching" into the students' "learning", and take this opportunity to actively guide students to change the original learning mode, improve their enthusiasm, creativity and class participation, and truly realize the students' "deep learning". Secondly, it is necessary to improve the teaching evaluation system, enhance the stability of information platform, scientific curriculum Settings, and strengthen teaching interaction, so as to make online teaching a useful supplement to offline teaching and effectively improve the learning effect of students.

4.2.   Realize the Effective Connection of "Online + Offline" And Actively Extend the Classroom Time and Space

Colleges should make full use of this opportunity, effectively integrate online learning resources, effectively promote the process of educational information, and accumulate rich experience in online teaching; At the same time, teaching staff should also grasp the characteristics of instant

communication in online teaching, and carry it through the whole process of student training. For example, in classroom teaching, we pay attention to the application of multiple teaching methods such as flipped classroom, project teaching and blended teaching, and rationally design the teaching content before, during and after class, actively improve the model of "offline main course + online tutoring", and solve the difficulties of after-school tutoring in the traditional teaching process through online teaching.

4.3. Strengthen the Training of Teachers' Informatization Ability and Improve the Level of Teachers' Application of Information Technology

Compared with the traditional offline teaching, the teaching environment, teaching design and teaching method of network teaching and the management of students have undergone great changes. In this context, the role of teachers has changed, and higher requirements have been put forward for the informatization level of teachers. In order to adapt to the changes and requirements of The Times, colleges and universities should strengthen training in the design of network teaching links and the construction of teaching resources, and further strengthen the training of teachers' informatization ability to lay a solid foundation for adapting to the online teaching links in the future. It can be carried out from the following aspects: Firstly, we should strengthen the teaching staff's cognition of education informatization, so that the thinking of online teaching can be internalized in mind and externalized in practice; Secondly, we should strengthen the basic theory training of information-based teaching. In addition, it is necessary to pay more attention to the training of teaching staff's application level and skills of information technology, fully integrate information teaching methods into all aspects of teaching, give full play to the advantages of online teaching, and be good at analyzing different characteristics of each course through information technology, reconstructing teaching plans, and conducting different teaching according to different needs of students. As far as possible to achieve the deep integration of information technology and education and teaching.

4.4. Cultivate Students' Independent Learning Ability

Online teaching undoubtedly has great advantages, such as breaking through the limitations of time and space, but at the same time, there are also some unavoidable defects, the most significant of which is the lack of real-time on-the-spot supervision of classroom teaching, online teaching actually has higher requirements for students' independent learning ability. In order to promote the organic integration of "online + offline", it is necessary to cultivate students' autonomous learning ability to overcome the problem of ineffective online supervision.

5. Conclusions

With the rapid development of information technology, the traditional teaching model in the post-epidemic era cannot meet the new requirements of the development of higher education in the context of the rapid development of modern information technology. At the same time, the reform of the talent training model of higher education calls for the integration and innovation of modern information technology. Online teaching is not only an effective supplement to offline classroom teaching, but also an irreplaceable driving force for higher education teaching reform. Although large-scale online teaching is a temporary measure during the epidemic period, it is an important direction of higher education reform and development in the post-epidemic period. In the post-epidemic period, the online and offline mixed teaching mode will become the normal teaching mode, and teachers and students' information literacy and online teaching and learning ability will

be greatly improved, and the independent, personalized and ubiquitous learning society will be in the future. This is an opportunity for the transformation of online teaching in higher education, which will accelerate the integration of higher education into the information technology era and trigger a revolution in quality management and quality culture of higher education based on online teaching mode.

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Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest

The author states that this article has no conflict of interest.

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