

Under the Background of COVID-19 Research on the Strategy of Improving the Effect of Online Teaching Based on "Internet and Big Data" of Finance and Economics Colleges in Shaanxi Higher Vocational Colleges

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Abstract: In order to minimize the adverse impact of the new crown epidemic, the Ministry of Education issued an important deployment of "suspension of classes, suspension of classes, suspension of schools", forcing universities and primary schools across the country to fully carry out online teaching. As an important part of online teaching quality assurance, online teaching effect evaluation is the "enabling" of traditional classroom, the core essence of realizing the connotative development of higher education, and the fundamental pursuit of education and teaching reform. Based on this, this paper takes Shaanxi higher vocational finance and economics colleges as samples to conduct a questionnaire survey on the effect of online teaching, finds out the problems faced by schools, teachers and students, and puts forward realistic, feasible and effective coping strategies from three dimensions of macro education system, medium school, and micro teachers and students.

1. Introduction

This paper mainly discusses how to improve the effect of online teaching under the background of epidemic prevention and control. With the global outbreak of the New World outbreak, the Ministry of Education issued the Guidance on the Organization and Management of Online Teaching in Universities during the Prevention and Control of the New World outbreak in February 2020, and the Organization for Economic Cooperation and Development, in collaboration with Harvard University, issued the Education Guide for COVID-19 in 2020 in April. This will provide a strong guarantee for the government, universities and society to implement online teaching and

minimize the adverse impact of the new crown epidemic. Online teaching effect evaluation, as an important part of online teaching quality assurance, is the "enabling" of traditional classroom, the core essence of realizing the connotative development of higher education, and the fundamental pursuit of education and teaching reform. Based on this, this paper takes Shaanxi higher vocational finance and economics colleges as samples to conduct a questionnaire survey on the effect of online teaching, finds out the problems existing in schools, teachers and students, and puts forward realistic, feasible and effective coping strategies from three dimensions of macro education system, medium school, and micro teachers and students. Its basic framework is shown in Figure 1:

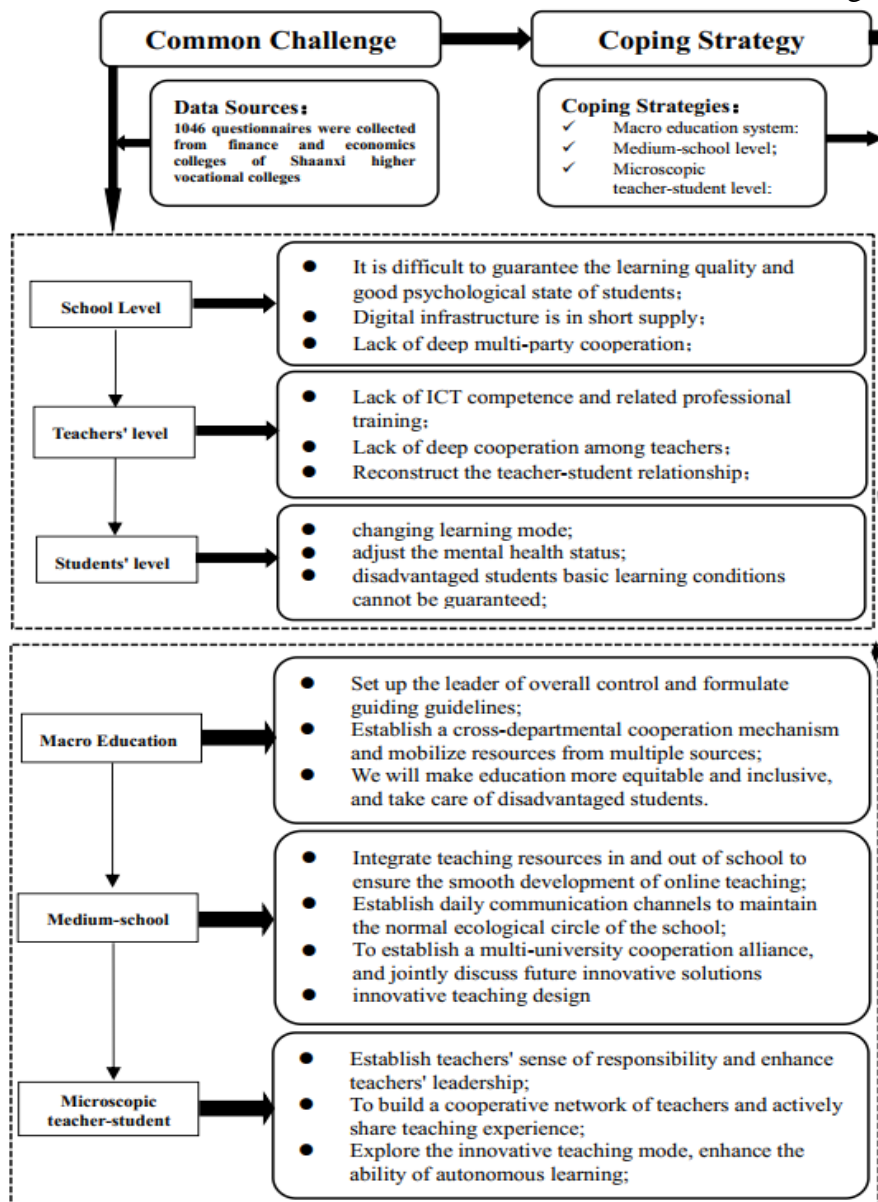


Figure 1: A framework of challenges and coping strategies

2. Problems with online teaching

Taking finance and economics colleges of Shaanxi higher vocational colleges as samples, this paper distributed 1046 questionnaires, and found that there are mainly three aspects of problems in teaching: schools, teachers and students.

2.1. School level

First of all, it is difficult to ensure high efficiency, high quality of learning and good psychological state of students. Specifically shown in: (1) How to correctly guide students to achieve high efficiency, high quality learning effect, and quickly master online learning methods and skills, which is the primary problem that schools need to solve; (2) Under the background of epidemic prevention and control, how to accurately grasp the psychological state of students, especially those with poor psychological quality and ability, is an important issue for schools to solve. Second, it is difficult to ensure that all students have access to adequate digital equipment and Internet resources, especially in remote mountainous areas without Internet access. How to realize normal network learning and obtain sufficient digital resources is an urgent problem for schools to solve. Thirdly, how to establish effective home-school cooperation mechanism for students to study at home is also an urgent problem. Home-based learning requires not only the cooperation and support of the school and parents, but also the need to ensure that students remain positive, optimistic and engaged.

2.2. Teachers' level

First, teachers lack vocational competence in information and communication technology (ICT) and training in related technologies. Teachers' ICT competence directly determines the effectiveness of online teaching. ICT training for teachers and policy support of relevant systems, resources and incentive mechanisms are very necessary. By making full use of the advantages and resources of online teaching, we can design reasonable teaching programs and carry out teaching activities in colleges and universities. Secondly, there is a lack of in-depth cooperation and communication between teachers. During the epidemic period, schools were forced to reform their teaching mode, and how to strengthen the in-depth cooperation between teachers to better achieve the effect of online teaching was an important challenge we needed to face. Thirdly, the online teaching model will reconstruct the relationship between teachers and students. How to transform the teacher-centered traditional classroom into a student-centered online teaching model is an important problem we are facing. Finally, how to innovate the teaching design, instead of simply copying the traditional classroom to online teaching, is also an urgent problem we are facing.

2.3. Students' level

First of all, students need to change the traditional face-to-face learning model.

Students should change from the traditional learning mode of passive listening to lectures and taking notes to participate in classroom interaction with teachers, deeply participate in all aspects of teaching, and realize the change from passive learning to active learning. Secondly, how to adjust the psychological state of students' online learning is a problem faced by many students. Students learn from the strict and orderly school learning state to the relatively free learning situation at home, many students will not adapt. In addition, long-term home online learning will make students depressed, irritable psychological state. Thirdly, the learning conditions of disadvantaged students cannot be satisfied. The remote areas of our country are faced with the dilemma of traveling everywhere to find the network. How to guarantee the home learning quality of disadvantaged students is an urgent problem that the whole society needs to pay attention to.

3. Strategies to Improve the Effect of Online Teaching

3.1. Macro Education System: Leading Group, Guiding Strategy, Multiple Cooperation

It is beneficial to realize the deep integration of information technology and education teaching to formulate appropriate online teaching evaluation system and development countermeasures for the government and education authorities. First, we should set up "leaders" for overall control based on the guidelines on epidemic prevention and control issued by the state. It is mainly reflected in the following three aspects: (1) absorb diversified groups, including education department leaders, front-line teachers, network information technology core personnel, students' parents and student representatives; (2) formulate reasonable responsibilities and obligations for diverse groups, so as to improve work efficiency; (3) Establish a reasonable and unified work schedule and time to achieve efficient, timely and orderly communication among groups of different dimensions. Second, through the establishment of cooperation mechanisms between the central government and local governments or between local governments, different departments and different levels of the prevention and control of the epidemic. In addition, it also needs external support from different industries. Thirdly, we should focus on disadvantaged students, especially those from poor families and registered students, and give them more care and resource support, so as to maximize the fairness and inclusiveness of education.

3.2. Medium-School Level: Resource Allocation, Plan Making, Multi-Connection

Facing schools, the online teaching effect evaluation system is constructed to provide a strong guarantee for the smooth operation of online teaching and the improvement of teaching quality. First of all, integrate the resources inside and outside the school, realize the sharing of resources, to meet the smooth progress of online teaching. Before the epidemic, China produced a large number of high-quality online teaching resources, which provided a strong guarantee for the smooth development of online teaching activities in China. In addition, the school also provides teachers with ICT-related vocational competence training. Secondly, the daily communication channels between students and the school should be established to realize the normal "ecosystem" between the school and students. The school can realize effective communication between the school and students by pushing information such as national epidemic situation, course learning method and course content introduction. Third, the establishment of university alliance, strong alliance, jointly discuss the future innovation plan. To establish an effective teaching implementation plan during the epidemic period, and realize the suspension of classes in colleges and universities, so as to complete the teaching task with quality and quantity guaranteed.

3.3. Microscopic Teacher-Student Level: Teaching Model, Role Division, Individual Competence

For educators, the online teaching evaluation system is integrated into teaching, promoting teaching by evaluation, promoting reform by evaluation, so as to realize the transformation of educators from knowledge deliverers to designers, helpers and instructors of learning environments. First of all, strengthen teachers' sense of responsibility, improve teachers' ability to control students and leadership. Teachers should give more material and psychological care to disadvantaged students and registered students. On this basis, improve the ability to control students, improve the efficiency of students online learning. Secondly, establish deep professional cooperation between teachers, actively share online teaching experience, and realize the learning objectives of online teaching with high efficiency and efficiency. Teachers not only stay in simple communication and coordination, but also achieve deep professional cooperation. At the same time, teachers actively share new methods and good experiences of online teaching, so as to effectively achieve the learning objectives and tasks of online teaching. Thirdly, it explores the innovative teaching mode suitable for online learning students to realize the ability of students' independent learning. Domestic

and foreign educators have begun to try new teaching models, teaching methods and teaching means, such as flexible learning, modular teaching and so on. In addition, teachers can set learning goals and complete pre-class tasks independently, so as to improve students' ability of independent learning.

4. Summary and Reflection

To sum up, Massive Online Teaching is a challenge as well as an opportunity for higher education. Through online teaching practice, it lays a foundation for the creation of first-class courses mixed online and offline. Online teaching implements the concept of OBE education and carries out student-centered teaching design and effect evaluation, which is conducive to continuously promoting students to develop the habit of independent learning and deep thinking. Online teaching is not emergency, it can be assigned to the traditional classroom, colleges and universities take this opportunity to strengthen cooperation with the depth of the course platform, make full use of the learning behavior analysis data, establish the teaching quality safeguard linkage mechanism, actively adapt to the era of "Internet +" new concept of knowledge and the demand of the ontology, will vigorously promote the "revolutionary class" and "revolution" quality, realize the education teaching in the classroom environment and the overall optimization under the network environment and change. In 2.0 under the time background of education informatization, we should take the initiative to seize the opportunity, meet the challenge, attach great importance to the teachers and students information literacy, promote teachers and students take the initiative to adapt to the information age, intelligence education teaching change trend of The Times, uphold the development idea, the education of information technology in depth fusion in education information into a gripper, and promoting the modernization of education in an all-round way.

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