Exploration and Thoughts on the Online Teaching Mode of Material Forming and Control Engineering during the New Coronavirus Epidemic

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Abstract: In order to fully guarantee the normal teaching order during the new crown virus epidemic. At the same time, we will do our best to achieve the goal of "stopping classes without stopping teaching, and without stopping classes". Shenyang University adopts online teaching methods for teaching in the 2020 spring semester. The teaching teachers of our school's material forming and control engineering major actively responded to the school's call to carry out online teaching activities in a comprehensive manner. On the basis of making preparations for online teaching, various methods such as Chaoxing Learning Communication, WeChat, Tencent Conference, and U Campus Smart Teaching Cloud Platform were used to carry out teaching activities. This article discusses the mode of online teaching management under this background.

1. Introduction

During the epidemic prevention and control period, the Department of Material Forming and Control Engineering of Shenyang University strictly implemented the notification requirements of the Ministry of Education and the Provincial Department of Education of "Suspension of classes without suspension of classes, suspension of classes without suspension", advance planning, overall arrangements, division of labor and coordination, and implementation of responsibilities[1-2]. The teachers and students of the whole department are united and united to ensure the progress and quality of online teaching. Since the cloud teaching, all courses have been opened according to the teaching plan, and the teaching runs smoothly and orderly[3-4]. The initial realization of "the quality of teaching will not be reduced, the course learning will not stop, and the research discussion will not be interrupted"[5].

2. Reform and Thinking of Online Teaching

2.1. Online Teaching Regulations

The quality of classroom teaching is the foundation of the teaching process. In order to further standardize teachers' classroom teaching behavior, strictly manage classroom teaching, and improve classroom teaching quality, online teaching regulations have been formulated.

(1) The teacher is the first person responsible for online teaching. Teachers are fully responsible for classroom teaching content, classroom teaching quality, and classroom discipline.

(2) Teachers must carefully prepare lessons before class. The key and difficult points of teaching, classroom teaching organization, teaching methods and means, and the arrangement of homework should be determined in accordance with student feedback and other aspects. Based on this, carefully write teaching plans and prepare for teaching.

(3) Teachers must carefully study teaching materials. Carefully design classroom teaching content. Achieve clear levels, rigorous arguments, and accurate concepts. Reflects the teaching

reform and academic achievements in the frontier of the professional field.

(4) In the teaching process, teachers should be full of mental state, contagious language, proficient and wonderful lectures, and thorough explanations of key and difficult points. Stimulate students' interest in learning. Encourage students to participate in classroom teaching.

(5) Teachers must be proficient in teaching content. Be able to teach without the lecture. The teaching language should be accurate, concise, and vivid, and avoid straightforward and rigid teaching.

(6) Teachers must adhere to the principle of teaching students in accordance with their aptitude. Use scientific and effective methods and methods for teaching. Avoid the phenomenon of only students telling but teachers' comments are not in place or no comments.

(7) All teachers must be able to independently produce multimedia courseware. Proficiency in operating multimedia equipment. We must make full use of modern teaching methods.

(8) Curriculum ideology should be carried out in accordance with the characteristics of professional courses, and positive energy should be spread in the course of teaching.

(9) The teacher's dress should be solemn and tidy. The appearance is simple and generous, simple and elegant. Fully reflects the characteristics of the teacher's profession and healthy aesthetic taste.

2.2. Problems with Online Teaching

2.2.1. The Network Teaching Model Still Needs to Adapt to the Teaching Teachers to Actively Adapt to the New Changes in the Network Teaching Model.

Explore new ideas, new methods and new ideas for online teaching. However, due to the rush of time and the defects of the network platform itself. It is difficult for individual teachers to adapt to online teaching based on the survey feedback of students. The following problems mainly exist in the teaching process of teachers. One is that individual teachers are not fully prepared for teaching. Live teaching is tense. Second, some teachers are not yet proficient in the operation of the online teaching platform. They have not yet mastered some common functions. The third is that some teachers are still lacking in teaching methods. They have not done enough to guide and inspire students. The imprint of the teaching model of "indoctrination" and "full-room infusion" is more obvious. Fourth, the teaching methods are relatively simple. It is still based on "teaching" instead of "learning". As a result, in the way of interaction, it is mainly the teacher's question. The student answers instead of the student's question and the teacher answers.

2.2.2. Students Lack Effective Supervision of the Online Teaching Process during Class.

Most teachers cannot realize face-to-face video of all the staff when they are teaching. The teacher cannot see the status of all students. There are mainly the following problems. One is that the teacher can only see the student's sign-in. The online shows that the students are in class, but the students are not there, so the attendance rate cannot be guaranteed. The second is that teachers cannot see students. It is difficult for teachers to communicate with students in time (including the communication of body language such as movements and expressions). It is not possible to make immediate adjustments based on the student's status. Third, the teaching effect still needs to be improved. The teaching activities of most teachers are limited to the classroom. The teacher does not know whether the student really knows the truth.

2.2.3. There are Many Platforms for Online Teaching.

At present, there are more than 10 online teaching platforms used by teachers in our school. Including Chaoxing Xuetong, Rain Classroom, Tencent Classroom, Tencent Conference, WeChat Group, QQ Group, Wisdom Tree, DingTalk, etc. Due to the different platforms used by teachers, students need to adapt to various platform environments. There are mainly the following problems. One is that some teachers have changed platforms. Some students cannot find a platform for class. Second, in the process of online classes, some teaching platforms have more online students than students in class. This situation will cause the openness of online class to be interfered by other

factors during class. Third, some platforms do not have audio and video playback functions. This causes a certain degree of inconvenience to students' review after class.

2.3. Thinking and Improvement Measures of Online Teaching

2.3.1. Further Improve the Organization and Implementation of Online Teaching Work.

Plan ahead and organize strictly to ensure orderly, smooth and efficient online teaching. Unblock teaching channels in the process of online teaching. Class teachers must make online teaching plans, courseware, and upload teaching materials in advance. Class teachers establish internal communication groups to share information and discuss problems. The teacher should optimize the teaching plan. In order to prevent network congestion from being unable to attend classes, prepare online teaching backup plans and alternative platforms in advance.

2.3.2. Improve the Methods and Methods of Online Teaching.

Ensure the quality of online teaching. Before teaching, the teacher selects and uses the network teaching platform according to the characteristics of the course and the function of the network platform. Strengthen the student supervision mechanism. Arouse students' enthusiasm for learning through sign-in, quizzes, random roll call, etc. Check the learning effect through periodic examinations. Do a good job of answering questions after class. Use online Q&A classes, QQ groups, and WeChat groups to answer questions for students to improve teaching quality. All teaching units actively promote the online small-class teaching model. According to the syllabus, teachers regularly publish video teaching materials every week, assign homework and organize online discussions.

2.3.3. Strengthen the Service Guarantee Mechanism of Secondary Colleges.

Improving the quality of teaching is inseparable from the hard work of the teachers. All teaching units should pay close attention to the teaching needs of teachers. Organize lecturers from time to time to learn the use of various online teaching platforms. Designate professionals to provide "one-to-one" assistance and guidance to teachers who have difficulty using the online teaching platform. Efforts to eliminate teachers' worries about online teaching. Actively explore the teaching mode during the epidemic. Successfully complete the established teaching goals to ensure continuous improvement of teaching quality and service level.

3. Conclusion

(1) The network teaching model still needs to adapt to the teaching teachers to actively adapt to the new changes in the network teaching model, and explore new ideas, new methods and new ideas for network teaching.

(2) Improve the dynamic optimization of online teaching methods and innovative ideas to ensure the quality of online teaching.

(3) Designated professionals will provide "one-to-one" assistance and guidance to teachers who have difficulties in using online teaching platforms, and strive to eliminate teachers' worries about online teaching.

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