

Research of Online-Teaching Mathematics in Economy under the Period of the Covid-19 Pandemic

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Abstract

Aiming at the novel coronavirus pneumonia epidemic, how to use the network to conduct online teaching in the course of economic mathematics and explore a new teaching form, which plays a very positive role in improving the teaching quality of application-oriented universities. This paper explores the effectiveness of the network teaching model in the teaching of economic mathematics during the epidemic period, and gives some Suggestions on the network teaching based on its own practical teaching.

Keywords

Epidemic situation; Economic mathematics; Network education model.

1. Introduction

In 2020, The Chinese people are under the shadow of the COVID-19 epidemic, which is spreading fast, affecting a wide range of people and difficult to contain. Since the outbreak of the epidemic, Xi Jinping has called for "strengthening confidence, solidarity, scientific prevention and control, and targeted measures", In order to win the battle against the epidemic, prevent the spread of the epidemic to schools, and ensure the safety and health of teachers and students, the Ministry of Education has issued a notice to postpone the start of the spring semester in 2020 [1], in the spring of 2021, universities can adjust the opening time [2], Many colleges and universities implemented the wrong time and wrong peak, and asked to do "no suspension of school, learning is not postponed. The epidemic hit the earth again, and on December 23, 2021, my city, Xi 'an, was forced to press the "pause button". The school was closed and all teachers and students conducted online teaching. Our school attached great importance to it and responded positively. While making all-out efforts to prevent and control the spread of the epidemic, the Academic Affairs Office and other branches combined with actual conditions and innovative ideas to provide online learning classes with characteristics of Xi 'an Eurasian University for all students.

As a key course of the college, economic mathematics should take the lead. But how to do a good job of online network teaching and how students through the network to learn economic mathematics, in the actual operation encountered a bottleneck.

Therefore, this article on classroom teaching and to study how to build the online learning classroom , on the one hand ,in order to improve the students' participation, on the other hand, is in order to improve the teaching quality of economic mathematics during the period of the outbreak, the study of complete economic mathematics teaching goals, improve teaching efficiency, as well as to the economic mathematics curriculum reform will have a positive impact.

2. To establish That Students Are the Main Body of Economic Mathematics Online Classroom Teaching

The purpose of teaching is to serve students, of course, the purpose of economic mathematics network teaching is no exception, but also to serve students as the teaching goal, mainly

through online network teaching, so that students' economic mathematics knowledge and students' own comprehensive quality can be healthy development as the main teaching goal. During the epidemic, online online economic mathematics learning -- online classroom teaching, naturally became the "main battlefield" to achieve this teaching goal. All these determine that the basic starting point of online classroom teaching design is to serve students, and all effective measures and means adopted by classroom design should reflect the "student-centered" and "student-centered" education and teaching philosophy. In addition, we should also realize that students are the main participants of online teaching, not passive and passive learning objects, but young thinking, vigorous, innovative consciousness and creative active individuals.

Network teaching is finally to be experienced by learners - students. Therefore, teachers should firmly establish the educational concept that students are the subjects of online teaching, and only after the concept of students' dominant status is correctly established, can students' dominant role in online learning be achieved and played [3], this ability reflects the will of students, teachers can truly achieve students in the heart. After such education concept is clear, the network classroom teaching content arrangement, the use of software, the choice of teaching methods, the choice of interactive ways, teaching feedback and teaching link design will be planned according to the actual needs of students.

3. The Value of the Application of Network Teaching Mode in the Teaching of Economic Mathematics

In college course teaching, economic mathematics is the "pain point" for students to learn. For "big business" students, it is the basis for students to learn professional courses. In the past students' learning, students feel that economic mathematics is particularly difficult, with much content, difficult methods, abstract and comprehensive, so it is always a "headache" course for students. During the epidemic period, how to make good use of the Internet and construct the classroom teaching mode of online learning in economic mathematics course will not delay students' normal learning and lay a solid foundation for students to learn professional courses, but also have great significance for improving students' comprehensive quality, cultivating self-control ability and self-learning ability.

In the traditional classroom teaching, teachers often pay attention to improve students' test-taking ability, pay attention to the deduction of mathematical formulas, especially for the postgraduate students, especially so. However, little attention is paid to students' ability of language expression, network search and software use.

But with the continuous of science and technology, cultivation of contemporary college students put forward higher requirements, the state advocates the cultivation of holistic education concept, especially the current epidemic, innovation of economic mathematics course teaching mode, network classroom teaching mode, is the need of The Times, this teaching mode can make students get better use of fragmented time, It can also enhance students' sense of identity and acceptance towards teachers, and guide students to better arrange their study and life during the epidemic [4].

As teachers of economic mathematics, we should adapt to the development of The Times, constantly explore diversified network education model of economic mathematics courses, guide students scientifically, let students face the epidemic with a more positive and healthy attitude, face the study of economic mathematics, and improve students' anti-epidemic ability and learning efficiency.

4. Advantages and Disadvantages of Network Teaching of Economic Mathematics Course

4.1. Advantages

1. Students can customize the learning schedule according to their own actual situation. Online instruction moves students from a standardized learning system (traditional classroom) to one that is based on the individual needs of each student and is flexible enough to allow each student to learn at his or her own pace. Students can learn the video at any time and anywhere according to their own time arrangement. They can watch it repeatedly or pause thinking when they don't understand it, and then continue to watch and learn when they understand it clearly.

2. The resources are more abundant, and students' ability to search and evaluate information is cultivated. Students' advantage in online learning lies in the abundance of accessible resources. In addition to videos and courseware provided by teachers, students have full freedom and access to multiple network resources. Different hardware devices and living areas are equipped with personalized learning resources for them. At the same time, students can effectively integrate, dig, analyze and evaluate the rich learning resources under the guidance of teachers, thus cultivating students' ability to search and evaluate information in the information age

3. Students learn posture, environment and so on freely, the pressure is reduced. Online classes encourage students to embrace a sense of security. Because it is online, students can create and choose comfortable learning posture and learning environment for themselves, thus reducing the pressure caused by fixed classroom environment. Students can freely choose the body posture suitable for learning, can quickly adjust their mental state, more easily participate in the classroom.

4.2. Disadvantages

1. Because it is the use of the network in classroom teaching, for students with weak self-control, sometimes difficult to resist the temptation of the network. In the learning process of network teaching, students can only rely on self-control ability to learn, because network teaching teachers can't effectively supervise students. Especially for some students who love to play games at ordinary times, it is more difficult to resist the temptation of the network.

2. Due to regional differences, the network signal in some places is weak, and students will appear the phenomenon of "sometimes and sometimes not" in the learning process, which will lead to the weakening of the coherence of students' knowledge learning, and sometimes the key places will affect students' understanding and use of some mathematical concepts, theorems and formulas.

3. Teachers' network teaching skills need to be strengthened. Because network teaching is a new teaching mode, although some scholars and teachers tried network teaching before, but only a few. In the face of the epidemic, all teachers have to carry out online teaching, which is difficult for teachers who have not been exposed to it, especially for some older teachers. During my class tour, I found that some teachers' classroom design for network teaching was single and inflexible, and some teachers even did not know how to use some teaching software functions. Therefore, it is suggested that teachers attend lectures, communicate more, learn from each other, and enhance the skills of online teaching.

5. Suggestions on Network Teaching of Economic Mathematics Course

The network classroom teaching mode requires teachers to upload relevant knowledge to the teaching platform in the form of video or network. Students first learn these knowledge by themselves and can watch them several times. When students encounter problems in the

process of using the network to learn, they can use the network to discuss the problems on the teaching platform, and then teachers will focus on the "face to face" in the network class, which is the so-called "learning before teaching" mode. Network teaching pattern changes the "classroom before class" teaching order and teaching structure of this model, compared with previous teaching form, to a large extent improved the economic mathematics course teaching effectiveness, not only let each student during the outbreak can make full use of your time, can learn anytime and anywhere, and for not knowledge can also learn over and over again. Students use this learning method to learn relevant knowledge of economic mathematics courses, which not only realizes differentiated teaching, but also makes the teaching concept of individualized teaching become a reality, which is in line with the overall trend of education development under the current epidemic situation, and effectively improves the quality of classroom teaching.

After continuous practical exploration, reflection and improvement, the author gives the following suggestions for the teaching of online learning class of economic mathematics course:

1. The teacher should make a questionnaire survey to the students. The teacher makes the questionnaire and gives it to the students before the class begins. The purpose of the survey is to understand students' needs and thinking about online learning through questionnaires. Roughly include students often use which network learning ways, such as learning communication, wisdom tree, has known, tencent live meeting, zoom live meeting, etc.), a live online course length, network teaching is the most worried about what, what kind of expectation interactions, expect how teaching feedback and communication have a problem how to solve. The class begins on January 3, 2022 in the university where the author works. A questionnaire survey is conducted among students on January 1. Through sorting out the questionnaire, the expected purpose is obtained.

2. On the basis of investigation, network classroom teaching design

is carried out. Through the questionnaire, understand to my two classes in this semester teaching students, most of the watch the video on the tree of wisdom teaching platform (because in usual semester courses, students have the network elective course), so I first of all, according to the outline of economic mathematics curriculum to make online, second in the wisdom tree consistent platform chosen and the outline of economic mathematics teaching video, Then asked the students to teaching video learning in the wisdom tree, regulations section corresponding to watch every week, problems encountered in the learning process, and then in the discussion area of the Tronclass teaching system discussion, can't solve the problem for discussion, and finally use tencent live meeting - concentrated in the live webcast class "face-to-face" solution. The design of network classroom requires that the learning objectives of each class should be precise, that is, the learning objectives of each class should focus on one or two points, and at most three points. Because compared with face-to-face classroom, network classroom for the reasonable arrangement of time and make full use of class has a higher request, all students in the network classroom is not in the same space, then the student is independent thinking, in the face of the task and the screen after the teacher in the whole process of have no way to know directly like face-to-face classroom teaching to students' learning situation. Therefore, in the design of the network classroom, classroom goal to further precision, and all the activities of the best focus on a challenging learning objectives to carry out, so to ensure that students participate in classroom activities, the precision of the learning goals have enough independent thinking, interactive with the time.

3. Adopt diversified teaching methods and interactive ways. Network classroom teaching can provide students with rich learning resources and adopt diversified interactive classroom teaching of discussion, communication and question answering. In the process of learning design, each learning activity needs to be matched with the network interaction. Teachers adopt diversified interaction methods in class, such as wechat interaction, Tronclass system

discussion area interaction, Tronclass platform class interaction, etc. Can also make students at tencent live meeting by typing the opinion, can let the student through a microphone when tencent live conference speech interaction, especially the mathematical symbols is large, via WeChat interactive images, such as I taught in fourth order was calculated by the nature of the determinant determinant, there are some steps when students do not understand directly through WeChat screenshots interaction effect is very good. Using diversified teaching methods and interactive ways can promote efficient and in-depth classroom learning.

These diversified teaching and interactive ways can change the focus of economic mathematics teaching from "full teaching" to "active learning". Students can look up learning materials online at any time, especially when teachers upload live video recordings to the Tronclass system, so that students can watch and learn repeatedly. From the background, it can be seen that the number of repeated watching is quite high. For example, I uploaded the qq video of calculating determinant. From the background, I saw that a student in class 2021 watched the video for 8 times. The student watched the video online for more than an hour, and also interacted with me on wechat. Therefore, in the favorable network environment, teachers and students strengthen communication through various ways of interaction in class and after class, and build a diversified interactive learning network. Teachers teaching platform by Tronclass system background for students for effective monitoring, combined with multiple interactive network teaching model of economic mathematics, the students of economic mathematics study by classroom extended to extra-curricular, economic mathematics teaching content and extracurricular study materials, the students' learning from passive to accept now becomes active inquiry. This will enhance students' interest in economic mathematics [5].

4. Students' learning should be evaluated and tested regularly. Homework was assigned at the end of each class and there were weekly quizzes. So on the one hand, is beneficial to teachers timely grasp the students' learning situation, on the other hand, is conducive to students mastery of knowledge by teachers adjust teaching progress and choose better and more appropriate way of teaching, interactive, and students of the teacher's evaluation result and the feedback from the learning have more clear understanding of their own.

5. Develop detailed classroom learning rules. The formulation of online classroom learning rules is produced under the personalized conditions of joint exploration by teachers and students, and it will be continuously improved with the improvement of the classroom [5]. Due to the teaching activity is conducted on the network, and face-to-face classroom there's a big difference, to worry about the noise, the first televised lesson many students choose to shut down the microphone at first, I couldn't see students, in order to know the students have been involved in the classroom teaching, then I put all the microphone to control all of the classmate, in the actual teaching process, In addition to independent learning time, other time all classmate of the microphone remain open, because I will design problems at any time, at any time call students to answer, so we can test whether students in the classroom at any time, the microphone remain open to let the students psychological feeling himself in class, he is in class, but also create conditions for students to participate in the classroom. Such classroom rules in line with class learning and subject learning provide a guarantee for deep learning classes.

6. Conclusion

During outbreaks, the teacher in completes the disease prevention and control at the same time, actively explore new ways of teaching with the new method, during the practice of economic mathematics course teaching to explore, to constantly renew the idea, actively explore diversified teaching methods, and timely sum up experience, continuous improvement, stimulates the student to study the economic mathematics enthusiasm, improve the efficiency

of teaching, This will have a positive impact on the current online teaching and the use of online teaching after the epidemic is over.

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