

Exploration on Online Teaching of Food Specialty Courses during Epidemic Period

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Abstract: During the epidemic period, the implementation of online teaching for food specialty courses. The author has integrated ideological and political education into the teaching, and organized online teaching by means of intelligent vocational education on resource platform and Tencent classroom on live broadcast platform. In the process of online teaching, the author readjusts the teaching plan, quantifies the assessment index of the course, designs the teaching according to the online teaching form, and reflects on the whole teaching process in order to improve the teaching method and achieve better teaching effect.

1. Introduction

During the COVID-19 epidemic prevention and control period, our school implemented the "guiding opinions on the organization and management of online teaching in ordinary colleges and universities during the epidemic prevention and control period" issued by the Ministry of education, and implemented the measures of "suspension of classes without stopping teaching, suspension of classes without stopping learning, and students without returning to school". In this context, our teachers have also begun to actively explore effective online teaching methods, and strive to carry out teaching through online teaching tools, combined with online live broadcast and resource platform. I have undertaken the teaching of the course "Food Analysis" this semester. The time has passed quickly. From the initial bewilderment and uneasiness to the ease now, I have a deep feeling.

2. Layout online teaching plan

When I received the notice of online teaching, I felt nervous. What kind of teaching method should be adopted, what teaching software should be installed, and how to use the software, I couldn't help beating a drum in my heart. Will the effect of online teaching be discounted? How to implement whether the students' learning tasks are actually completed? How to implement the effective supervision of teaching?

No matter how confused I am, I always have an organizing principle in my heart: "content is king, experience is king"!

Through the study of classes, Tencent classes, Tencent conferences, QQ groups, nailing and other software, as well as continuous comparative research, I chose Tencent classes under comprehensive consideration. Tencent classes has the advantages of simple operation, rich functions, smooth process, automatic recording and playback after class, and the popularity of instant communication software on Tencent platform among students is high, so I decided to use Tencent class for live online teaching.

Network courses are characterized by strong openness and abundant resources. Therefore, I took advantage of these advantages to integrate the high-quality resources on the platform of intelligent vocational education and my own existing resources to design teaching resources that are in line with my own curriculum while teaching live, so as to facilitate students to learn independently.

In the end, I used the resource platform of intelligent vocational education to give lectures through

Tencent's live classroom, and used QQ group to assign learning tasks, homework and separate question-answering and communication with students to assist in teaching.

3. Unify ideas with students, and have a good online class

All of a sudden, teachers are confused when they hear about online teaching, and students must be confused when they know this way of class. Before the start of the class, I made a thorough investigation of the students' situation, mobilized the students' thoughts in QQ group, and also described the teacher's class mode, assessment scheme, and the preparatory work that the students need to do, so that the students can accept this class mode in this special period, actively cooperate with the teacher, and thus have a good learning experience.

4. Using epidemic materials to strengthen the infiltration of Ideological and Political Education

During the epidemic prevention and control period, many admirable heroes and models emerged, and many ordinary people stuck to their work with lofty professional ethics in ordinary posts. When preparing lessons, I organically integrated the epidemic prevention and control stories into the teaching according to the curriculum content, and conducted ideological and political infiltration education for the students.

5. Teaching preparation of online and offline Hybrid Teaching

5.1 Adjust the teaching plan

I divided the teaching contents in the teaching plan into three ways: online, live and offline. Online self-study generally considers arranging some pure theoretical knowledge that is easy to understand. In live teaching, apart from some contents that can be taught by self-study, it is necessary to sort out the important and difficult points, the easy mistakes, or the knowledge system by using live teaching. However, some of the experimental operations that must rely on physical instruments and equipment are completed offline after the start of school (see Table 1).

Table 1 Teaching plan

Classes	Topics and main teaching contents	Teaching methods
Introduction	The nature, task and function of food analysis and inspection	Online
Item 1 Task 1	Collection, preparation and preservation of samples	Online
Task 2	Sample pretreatment	Live
Task three	Analysis and treatment of test results	Live
Task 4	Test report	Live
Simulation Tasks	Sample collection	Offline
Item 2 Task 1	Food sensory testing method	Online
Task 2	Food physical examination method	Live
Task three	Food chemical detection method	Live
Task 4	Food Instrumental Analysis	Live
Task 5	Food microbiological examination method	Live
Simulation Tasks	Spouse test, three-point test	Offline
Item 3 Task 1	Inspection of general ingredients of food	Live
Task 2	Determination of food additives	Live
Task three	Determination of trace elements in food	Live
Task 4	Determination of pesticide and veterinary drug residues in food	Live
Simulation Tasks	Determination of total acidity of liquor	Offline

5.2 Adjust the quantitative assessment method of curriculum

I increased the proportion of online part in the results. Specifically, the online learning participation of students, homework done, tests and other aspects are assessed, which is also to better monitor the online learning effect of students (see Table 2).

Table 2 Quantitative index of course assessment

Evaluation objectives	Assessment element	Weight (%)	Remarks
Process evaluation	Student login time	10	Online login time 50min, 0.1 point per 50min
	Online work	10	Complete 5 online assignments, 2 points each time
	Online classroom discussion	10	Participate in class discussion online no less than 2 times, 5 points each time
	Offline operation	5	Complete two offline operations, 2.5 points each time
Summative evaluation	Classroom test	15	Complete 3 theoretical tests online, 5 points each time
	Final exam	25	Offline completion
	Training skill assessment	25	Offline completion

5.3 Online teaching course design

On-line teaching needs to give priority to theoretical knowledge and skill knowledge that requires little practice environment and equipment. According to the curriculum framework design, the project-based teaching unit is composed of knowledge points and skill points. And the construction of knowledge points, skills as a unit of curriculum resource packages.

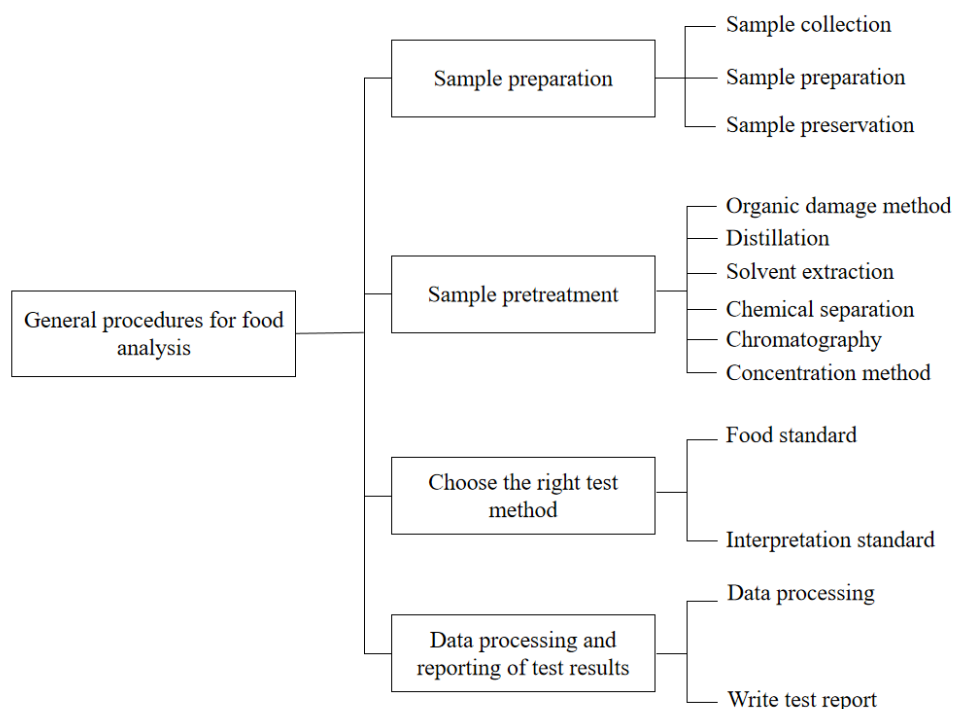


Figure 1

When constructing the curriculum framework, the knowledge and skill points should be decomposed and graded, generally divided into level 1 knowledge points, level 2 knowledge points and level 3 knowledge points. In order to enable students to master these knowledge and skills, this

can become a task we release to students. After such knowledge points are graded, it is more convenient for students to grasp the whole knowledge system.

Let's take the course "Food Analysis" I attended as an example. One of the project teaching modules is: General Procedures for Food Analysis. Its secondary knowledge point is that the process of analysis and detection includes four parts, sample preparation, sample pretreatment, selection of appropriate detection methods, and data processing and reporting of detection results. They correspond to the four tasks required of students. The next level is the third level knowledge point, which is the corresponding sub task. And after the completion of this project, we can also use this kind of mind map to make learning summary for students.

6. Online teaching process

6.1 Preview before class

Before each class, I will notify the next learning content through the class learning communication group, remind the students to prepare for the class, and test the students' preview effect through classroom questioning and other methods. In this way, students will be familiar with what they are about to learn, and the degree of strangeness in learning will be reduced, thus making classroom teaching smoother and helping to enhance students' confidence in learning this course.

6.2 Live teaching

I set up online classes on Tencent's classroom teaching platform and carried out teaching work. Taking advantage of Tencent's diverse classroom methods and convenient communication, the method of inspiring and asking questions is adopted in the teaching process to guide students to think autonomously, to mobilize students' initiative and enthusiasm in learning, and to carry out real-time calculation and deduction on the teaching screen to make breakthroughs in teaching difficulties. In the classroom, we pay special attention to the communication with students. We use the methods of raising hands to speak, classroom practice, real-time communication, etc. to understand the students' mastery of the learning content in time, and answer the questions one by one, so as to improve the pertinence and effectiveness of classroom teaching.

6.3 After class practice

Every time after class, I will arrange corresponding exercises to enable the students to master the contents learned on that day. Announce the completion and correction of homework on that day in the learning exchange group of the course, urge students to finish homework on time, correct homework in time, and learn from excellent students, so as to form an incentive atmosphere and arouse students' learning enthusiasm. On the other hand, I also know students' mastery of what they have learned in a timely manner through correcting homework, and answer questions online in a timely manner. I insist on the combination of general teaching and individual answering questions, thus achieving the teaching goal well.

6.4 Class attendance

In the process of live teaching, Tencent's attendance sheet is used to check the attendance of students, check the attendance of students, and master the attendance status of students in combination with the check-in function of the classroom, so as to ensure the effective and normal classroom teaching.

7. Teaching reflection

7.1 Change the thought and improve the knowledge of network teaching

Through this online teaching activity of "suspension of classes and non-stop learning", I have realized that online teaching is an essential teaching method. With the continuous development and progress of information technology, network teaching has become a powerful supplement to traditional offline teaching due to its strong openness, diverse communication methods and resource sharing. Teachers should adapt to this new teaching method, recognize the importance and advantages of online teaching, take the initiative to join in it, make full use of the advantages of online teaching, update the teaching mode, provide students with high-quality and diversified teaching mode, so as to achieve better teaching effect. Online and offline hybrid teaching mode will become the daily mode of teaching work.

7.2 Improve teachers' teaching ability and adapt to the new mode of network teaching

Online teaching has the characteristics of flexible learning time, diverse ways of communication between teachers and students, abundant resources and repeatability. It is quite different from traditional offline teaching in technology, methods, concepts and other aspects. Only through continuous study and exploration can teachers master relevant teaching skills and teaching methods so as to adapt to this new teaching mode and improve teaching quality.

7.3 Strengthen classroom control and improve teaching quality

Because of the particularity of online teaching, that is, teachers and students are not directly face-to-face communication, so compared with the traditional offline teaching, more attention should be paid to the control of teaching quality to ensure that students can normally and effectively complete their learning tasks. To achieve this, we must take a multi-faceted approach. First of all, teachers need to integrate theory with practice, carefully design teaching contents, make every lesson simple, stimulate students' interest in learning, and fully mobilize students' learning initiative. Secondly, it is necessary to formulate corresponding assessment standards so that students can understand the importance of attendance in the course scoring, and supervise students to complete their studies through the attendance and sign-in functions provided by the teaching platform. Finally, students can be organized to set up study groups in the class to encourage and urge each other to complete their study tasks.

7.4 Pay attention to teamwork and do a good job in curriculum resource construction

The construction of a high-quality online course is not only to upload the commonly used teaching materials to the network for students, but also to make corresponding adjustments to the teaching plan, teaching methods, assessment methods and other links in combination with the characteristics of online teaching. The collected high-quality teaching resources also need to be reasonably arranged in combination with the characteristics of the course. It is difficult to complete these tasks by one teacher alone, so the construction of online courses must strengthen team cooperation, and use everyone's collective strength, brainstorming, and all the strategies and efforts to complete them together.

8. Summary

"Although the road is endless and faraway, I still want to pursue the truth in the world.". With the development and progress of the times, teachers should change their teaching ideas, renew their teaching methods, learn new knowledge and construct new teacher-student relationship. I will continue to study, think and practice in my future work.

References

[1] During the period of epidemic prevention and control, we should do a good job in the organization and management of online teaching in Colleges and universities [2020-02-05]
http://www.moe.gov.cn/jyb_xwfb/gzdt_gzdt/s5987/202002/t20200205_418131.html.