Lead the Production of Micro Courses and Promote College Teachers' Research on Deepening Teaching

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Abstract. College teachers’ teaching is faced with huge challenges in the Internet plus era, however, high-quality micro teaching resources can provide guarantees to improve teaching effect under this circumstance. Schoolman Center for Teaching Development should communicate with the companies in related technology actively according to the problems of the shortage of micro class resources and no experience in equipment operation and no understanding of technology and so on. Measures for improving the use of micro teaching model and the teaching research and teaching effect such as recording the micro class, technical training and the study on the subject should be taken, which can form firm backing for the college teachers.

Introduction

It was stated that the new thinking and directions of action which are proposed by ‘Internet Plus Education’ and raised for the reform of traditional teaching mode in colleges and universities, have attracted the attention of many college teachers by The Government Work Report in 2015. Promoting the quality of school education with the use of the Internet, such as micro class, has been recognized by the elementary and middle schools. Since the first national university micro teaching competition, colleges and universities have attached huge importance on microteaching. However, the values of microteaching are poorly understood by many college students and it remains to be studied on how to use it effectively and how to overcome the technical difficulties in production, both of which need a period of time. Facing these practical problems, the Schoolman Center for Teaching Development should guide the way to development for young teachers and communicate with the companies in related technology actively. Measures for improving the use of micro teaching model and the teaching research and teaching effect such as recording the micro class, technical training and the study on the subject should be taken, which can form firm backing for the college teachers.

The Significance of Micro Course in Teaching

1) The Meaning of Micro Course

There are various versions of the micro courses at home and abroad. In foreign countries, the concept of micro class was first stated by David Penrose from San Juan College of the state of New Mexico. It says that the micro course is a kind of video curriculum aiming at a certain knowledge point or the teaching link and designed on the basement of the modern information technology and supporting a variety of learning methods. In 2011, Hu Tiesheng first proposed the concept of micro lesson, which says micro class is an organic combination of all kinds of teaching resources for teachers to carry out teaching activities in the classroom teaching aiming at a certain knowledge or teaching links and it is in accordance with the requirements of standard and teaching practice of the new curriculum, taking the teaching video as the main carrier.

2) Characteristics of Micro Course

The play time of micro class is about 5-10 minutes, only for a knowledge point or a specific problem, which can make the theme clear and make the content brilliant. The short time is in
accordance with the law of visual accommodation and cognitive characteristics, avoiding students’ fatigue and distraction. Learners are not limited by time and space, so they can choose their own interest no matter when it is and no matter where they are. For those knowledge points that are hard to understand can also be repeated learning, which are made up for the shortcomings of traditional classroom teaching model.

3) The Teaching Significance of Micro Course for Teachers and Students

For students, micro class can meet the students' autonomic learning and individual needs. In the meanwhile, the use of the Internet and modern technological equipment help to break through the limits of time and space and help the students to learn whenever it is and wherever they are. Students can do the preview through micro class and the harvest of the classroom will be acquired more if students go for class with their questions. The knowledge points hard to master can be repeatedly learned to achieve the expected effect and maximum benefit. Some content of micro courses can also be the extension of the teaching content, so as to expand students’ horizons.

For teachers, they can make selection in the present micro library according to the level of their students. Teachers will also get improvement in the selection process, which is good for teachers’ skilled development. Provided that there is no suitable micro classes for students taught, teachers can produce micro class suitable for the characteristics of the students according to students' level of knowledge and their ability to accept. In the production process, not only does the teacher constantly improve teaching methods and contents, but also to deepen the understanding of knowledge. Through the rethink in the course of selecting or making a micro course, the teachers' teaching ability will get greatly improved.

Difficulties Faced by Teachers in the Use and Production of Micro Courses

A number of attempts and research on micro course teaching have been carried out since 2011, and it was found that the micro course is a good complement to the traditional classroom teaching through the research of all kinds of literature related. It is a new teaching mode which plays a positive role in promoting the teaching effect in colleges and universities with remarkable effect. However, many factors in the application of micro teaching is less than satisfactory.

1) Problems Existing in Available Micro Courses

With the deepening of the research and development of the micro courses, the micro class resources on the Internet is becoming richer day by day. However, due to the uneven quality of micro classes, available micro course data for teachers to download is limited which contributes to the phenomenon that the supply can hardly satisfy the demand. Moreover, the content and method of the micro course can not meet the teaching needs of the students of different majors and different levels. The teaching effect will be affected by different selection of teachers.

2) Problems Existing in Teachers' Homemade micro courses

As the internet can’t provide targeted micro classes, many teachers start to make the micro classes by themselves according to different levels and different majors of students. But it’s hard to produce high-quality micro classes due to the nonstandard production and the lack of skilled and artistic knowledge and the experience on how to operate the equipment. Even if we can find specialized technical staff for help, the problems that their not understanding the content of professional knowledge will lead to the impact of the quality of the production of micro courses remain to be solved.

Schoolman Center for Teaching Development Lead the Production of Micro Class and the Promoting of Teaching Research

For the thorough implementation of the Plan for National Medium and Long Term Education Reform and Development, according to the spirit of Notice on the Construction of Teacher
Education Development Center from Beijing Municipal Commission [2011] No. 701, our school decided to establish Beijing Institute Of Graphic Communication Schoolman Center for Teaching Development in October 2012 after the discussion, so as to promote the construction of teachers' teaching platform, deepen teaching reform and improve education quality of teaching, and improve teachers' teaching competence.

Schoolman Center for Teaching Development should take serving the teaching work and promoting the development of teachers as the main task, organize teachers' teaching training, improve the teaching level of teachers and teachers' teaching ability, promote the reform of education and teaching innovation and provide services for the school teaching work. With the development of era, the Internet is inseparable with our work and learning. For adapting to the application of new technology in the teaching, Schoolman Center for Teaching Development guides the young teachers to carry out the teaching reform actively and explores the new teaching mode in the Internet era. Measures as following are taken like:

**1) Organize Micro Training**

The micro course is a new thing emerged with the development of modern information technology. In other words, it is strange for teachers, including its connotation, characteristics and production.

Schoolman Center for Teaching Development organized micro training specifically and invite micro teaching design expert Yang Dongxiao to deliver a speech on three special topics, The Production and Application of Micro Course, The Production Process of micro course and Micro Teaching Design in 2015, so as to deepen the teachers’ understanding of micro courses and encourage all the staff to use and make micro courses.

**2) Allocate Special Funds to Support Micro Courses**

Special funds was allocated to support young teachers to make micro courses in 2015 to 2016. In the meanwhile, Schoolman Center for Teaching Development cooperate with the specialized company completing twenty courses according to the technical problems existing in the course of the micro class. Four courses including Higher Mathematics took part in the first Beijing university mathematics micro course instructional design competition. And other four courses including Applied Chemistry participated in the Education Information Center micro course competition held by the Ministry of Education. Among them, three courses were awarded the second prize, and the other was awarded the third prize. With the increasing of the micro course and the accumulation of recording experience, the quality of the recording curriculum has been constantly improved.

**3) Organization of Reflection, summary, Promotion and Outlook of the Micro Courses**

*(1) Organize the Micro Class Research Team to Produce Micro Courses of High Quality*

The production of micro courses of high quality cannot be done without the support of modern information technology and the development of technology cannot be done without the participation of specialized technical personnel. The quality of the micro courses can hardly be achieved without advanced education idea and well-designed teaching methods. The teaching experience, the teaching levels and different personalities are vary from each teacher. Micro courses of high quality must be produced through the constant communication with the technical personnel based on the cooperation between the young teachers and experienced middle aged teachers, the combination of the innovative ideas from young teachers and rich teaching experience and the deep understanding of knowledge from middle aged teachers.

*(2) The Cooperation Between Teachers and Students*

Contemporary college students are growing up with in the age of Internet, which means they are get used to acquiring knowledge through the network platform and they have the ability to improve some kinds of knowledge hierarchy through video production software. Colleges’ education differs a lot from junior’s and high school’s. We attach more importance on the cultivation of students'
autonomous learning ability, which means taking the idea that we should regard students as the main and let them guided by teachers as the guiding ideology. Young students will be divided into teams and I believe they can produce a more imaginative video than the teacher's through cooperation. Teachers can provide students with micro courses’ topics and can also allow students to choose their own topic. Under the drive of the task, students will make discussions repeatedly to ensure the quality of the micro course.

(3) Set up Relevant Encouraging Measures to Promote the Study of Micro Courses

The school is the direct department to promote micro class teaching research and we are supposed to set up a specialized study on micro class. The school should also bring the research into the reform project and give support in funding. Research on micro class teaching mode, applicable policies and the evaluation system of effects, which help to make organic combination between the research and application of micro courses and let micro class play a role in the actual teaching.

(4) Cooperate With School Network Center or Professional Technology Company

High quality micro class can be produced through the construction of the organization, technology and incentive system in the course of micro course for teaching staff and with the help from professional teachers, the school network center or professional technology company.

In the era of information technology, micro class teaching and production will change the past teaching mode and promote the students' situation of autonomous learning. To ensure the quality of the production and make better use of it in teaching students, achieve more ideal teaching effect, Schoolman Center for Teaching Development takes measures like organizing the training and recording of the micro course, supporting special research and making discussions on promoting the development of micro courses in our school to improve the teaching level of teachers and promote the education and teaching reform.

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Reference


