

# Discussion on the Shooting Skills of Micro-courses

Tao Jiang<sup>1</sup>, Yin Xiao<sup>1</sup>, Na Zhao<sup>2</sup>

<sup>1</sup>Changchun University, Changchun City, Jilin Province, 1300221, China

<sup>2</sup>Jilin Provincial Government Investment Fund Management Co., LTD. Changchun City, Jilin Province, 130000, China

**Abstract:** The micro-course refers to use media files such as short videos to broadcast the objects, knowledge, skills and other content that the teacher will explain or teach to the students through modern multimedia teaching equipment. This paper analyzes the process of making micro-courses, and points out some problems encountered by teachers in recording micro-courses, and draws on some of the author's experiences to expound some techniques in the process of recording micro-courses, so that teachers can make micro-courses with the best effect.

**Keywords:** Micro-courses, The video production process, Skills

## 1. Introduction

With the development of educational informatization, more and more classrooms use multimedia to teach, which brings vitality to classroom teaching activities. The introduction of multimedia has stimulated students' interest in learning and improved the efficiency of teachers' teaching. The micro-course utilizes the extension of multimedia technology to help teachers to more vividly and intuitively display the content that cannot be felt or manipulated in the theoretical class. It can also focus on a certain knowledge content, and students can repeatedly watch and learn at any time and anywhere, which has become an indispensable method and means in teaching. At the same time, with the continuous development of the network, the micro-course use the online education platform, which has the characteristics of fragmentation and short time, to satisfies the needs of the public to use various idle time for learning, and provides more selective learning opportunities for learners. Online education courses have become a new teaching trend. With the continuous development of micro-courses, more and more teachers are involved in the production of micro-courses. Professor Li Zeng, from the Department of Educational Information Technology of Shanghai Normal University, said that "The micro-course refers to a small course with a clear teaching goal, a short content, and a focus on a problem within 10 minutes." Faced with the technology of making video files for micro-courses and the skills of using some software, it is difficult for the majority of teachers to be able to do anything, especially for the teachers who are not majoring in educational technology. This paper mainly discusses how to make micro-courses and how to make micro-courses in teams, and some skills that can be used in the process of making micro-courses.

## 2. Production Process and Method of Micro-courses

### 2.1. Micro-courses made by teachers themselves

At present, for university teachers, conditional schools will establish professional recording rooms to assist teachers in the production of micro-courses, but more teachers will use the screen recording software to record the teaching process. When using the screen recording software, the instructor only needs to demonstrate the courseware (PPT, audio, video) on the computer screen, select the video and audio format that the instructor want to record, and the software will record the operation and explanation of the screen all the time. At the same time, during the recording process, the tools required usually include a microphone, a tablet. At present, the screen recording software commonly used by teachers includes Camtasia Studio, Snagit, CyberLink YouCam and so on. Commonly used transcoding tools for output formats include Beaver Nest Universal Video Converter, Format Factory Video Converter, MP4/RM Conversion Expert, Super Conversion, and more.

The advantage of using the screen recording software for the micro-course is that the operation process is simple, convenient and easy, and the teacher can almost complete the entire recording process. Of course, the inadequacies are also obvious. As a "product level", the level of expression of teaching video is slightly poor or the quality of the work can not reach the ideal state. Moreover, teachers need considerable knowledge of computer operation in the process of production.

### 2.2. Micro-courses made by the team

There are still some deficiencies in the production of micro-courses by teachers themselves, such as the control

of software operation techniques. A good micro-course work is not as simple as a video. If you want to record an excellent micro-course work, you usually need the support of the relevant technical team.

First of all, the production team must communicate with the instructor to understand the characteristics and production requirements of the micro-course, and design the sub-shot script according to the differences in the subject categories and the teaching style of the teacher. This link is very important, and it is related to whether the work can finally meet the effect of the course. The video recording and post-production staff have rich experience in the production of TV teaching films, and are responsible for the completion of landscape, camera, lighting, recording, and post-production. Its hardware requirements mainly include cameras, lights and other equipment. The team's post-processing editing work includes the transcription, editing, compositing, and subtitle processing of the video, and interspersing corresponding auxiliary teaching resources such as prompt slogans and animations into the video. Commonly used post-editing software includes Ocean Nonlinear Editing, Sobey Nonlinear Editing Software, Final Cut Pro, Ulead MediaStudio Pro, Ulead MediaStudio Pro, Canopus EDIUS, and more.

### 3. Skills on Making Micro-courses

#### 3.1. Skills on self-made micro-courses

Micro-courses recording can not require the pursuit of the most advanced technology, but must be innovative in form. When using the screen recording software to create a self-made micro-course, teachers can use Windows' own drawing tools or handwriting boards to enhance the sense of hierarchy by borrowing vivid dynamic prompts. In the process of making micro-courses, it should be noted that the teacher should give a trial lecture in advance, and try and proofread it again and again to get the most accurate lecture. At the same time, the speed of the teacher's explanation is not too fast, and the mouse should not shake freely on the desktop. The design of the slide file should be uniform, and the background color should be visually comfortable. When recording a course, the teacher's voice should be clear and loud, and the surrounding environment should be quiet. After the recording is completed, teachers with certain software operation techniques can perform simple post-editing and beautification work on the video, adding the title and ending to the video to improve the quality of the micro-course. Commonly used home-level non-linear editing software includes VideoStudio, PowerDirector, Pinnacle Studio, etc.

#### 3.2. Skills on team-made micro-courses

After all, the teachers' energy and skills are limited. The micro-course production is not a screenshot of traditional

classroom teaching. To make a vivid micro-course, it is necessary to cooperate with professional production teams.

Skills on scripting for split-lens. The format of the split-lens script includes lens number, lens motion, scene, lens time, screen content, and so on. Only by doing a good job of split-lens, the teacher can grasp the class time more accurately, predict the pause between classes, and better grasp the shooting rhythm. The production team needs to understand the teacher's ideas and discuss the feasibility of the split-lens script with the teacher and make professional suggestions.

The skill of the teacher to appear. Teachers should give a trial before recording to ease the tension in front of the camera. The teacher's clothes should be neat and tidy. For example, there is a blue box background in the studio, and the clothing color should avoid the background color. If the teacher wants to use the word processor, the teacher should pay attention to the positional relationship between the eyes and the camera to keep the teaching state natural.

Recording skills. The shooting methods include classroom real-time shooting, setting up scene shooting, studio portrait shooting, studio portrait shooting, and adaptation shooting. During the indoor shooting, the cameraman should pay attention to adjust the position of the camera, and focus on the middle and near view. When shooting outdoors, the cameraman should mainly use side mid-view and close-up, and use more fixed lenses to ensure the quality of video.

Skills on audio recording. In the case of accurate documents, teachers can make sound recordings in the studio first, and later edit them in combination with the screen to achieve better audio effects.

Skills on editing teaching material. Compared with the screen-based micro-course, the processed micro-course video is superior in terms of audio, picture and overall effect. The editing of teaching materials includes drag-and-drop, scrolling, cropping, replacing, overwriting, and inserting, adding subtitles and suggestive discourse. When the teacher is the main picture, the post-production can be through the form of pictures in the picture, cut-out, interpolation of other multimedia pictures, films, animation. When PPT is the main picture, post production can switch teachers' pictures for a short time when PPT stays for a long time. It can also add special effects to form three-dimensional effects and motion effects later to increase the richness of the picture.

Skills on packaging micro-courses. The production of titles and ends can enhance the visual effect of the whole course. Titles can be combined in a variety of ways, such as by adding a variety of pictures that meet the subject of the course, film and television material, teacher's presentation, animation display, character simulation. Common-

ly used software includes Adobe Photoshop, Adobe After Effects, CINEMA 4D, 3Dmax, flash, etc.

Although post-production is the last link in the process of making micro-courses, it plays an important role in the whole process. Nonlinear editing can do the basic editing of teaching lens, but also add multi-layer synthesis functions and digital special effects, three-dimensional animation teaching model. Through these post production techniques, the production quality of the micro-course has been further enhanced.

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