The Inquiry of Micro-Lesson Production Process and Method

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Abstract. "Micro-lesson" is a teacher around knowledge (or skills in the classroom and outside the educational task of teaching a single course of a teaching method of teaching, with clear objectives, targeted and teaching time is short features. Currently, micro lesson has become an important resource for micro learning, this paper describes the classes defined on the basis of micro, micro-class production processes and related considerations are summarized, and then making several commonly used micro-lesson method were compared analysis, with a view to making the relevant micro lesson provides a reference.

Introduction

"Micro-class" refers to the video as the main carrier of teachers around a record of teaching content or teaching carried out brief, complete teaching activities to help other teachers to improve classroom teaching and promote professional development. Core resources are "micro-video" while the instructional video may contain content related to "micro courseware", "micro-exercises" and other auxiliary teaching content. In education, the micro-lesson taught content was "point" shape, fragmentation, the knowledge, the materials may interpret questions succinctly, summed up the test center can also be a method to impart knowledge of teaching experience and other skills explain and demonstrate. Effective supplement in the form of micro-lesson classroom teaching, micro lesson not only for the dissemination of knowledge of the era of mobile learning, but also for learners personalized, demand deep learning. Table 1 shows the Micro-Lesson Resource Characteristics.

Table 1　Micro-Lesson Resource Characteristics

content	Smaller, more streamlined
aims	single
time	Short, usually within 10 minutes
use	Convenient for network communication
Resource capacity	Small, convenient mobile learning

Classification of the Micro-Lesson

According to the Teaching Methods to Classify. According to Professor Li Bingde the classification of teaching activities in primary and secondary schools teaching methods commonly used summary, but also for teachers to facilitate micro-class classification understanding and practice of operational development, micro-lessons divided into 11 categories, namely class lectures, Q class, inspired by class, class discussion, demonstration classes, exercise classes, laboratory classes, performance classes, independent study classes, cooperative learning classes, inquiry-based learning class. It is worth noting that the section of the micro-lesson works generally corresponds to only a certain type of micro-lesson, but may belong to two or combination (such as questions lecture classes, cooperative inquiry etc.) micro-lesson type of two or more, the classification is not unique, it should retain a certain openness. At the same time, due to the continuous development of modern education theory, innovative teaching methods and means, the type of micro-lesson is not static, teachers need continuous development and improvement in teaching practice.

According to the Main Aspects of Classroom Teaching (Process) Classified. Courses can be divided into micro-review class before class, lesson into class, knowledge to understand class, class exercises to consolidate, expand class summary. Other types of micro-lessons and teaching-related are: Lessons category, class meeting class, class practical classes, activities, and so on.

Notes of Micro Lesson Production

Micro-Class Production Process. Topic - write lesson plans - courseware - teaching implementation and shooting - post-production - Teaching Evaluation Reflection

The Standard Topics. Course topics are micro-micro lesson create the most critical part of good topics multiplier can explain, recording, bad micro lesson topics can also make even mediocre become commonplace.

Teaching Key and Difficult. Section of a micro-lesson taught general knowledge, for knowledge of this choice, about the knowledge structure is designed for teaching key and difficult to produce micro-lesson, it is a better choice, more in line with the original intention of making micro lesson: share teaching resources for students (teachers) doubts, inspired teaching.

To be Suitable for Expression of Multimedia. As a micro-class media content designed to fit use multimedia features, not suitable for the use of multimedia content expressed, the results produced may be futile, because maybe blackboard teaching or practice of teaching effectiveness activities better. But also make the process of teaching mediocre, so that the viewer lose the desire to learn. Thus micro lesson topics to be suitable for use multimedia expression, a good fit for rich graphics images, colorful animation, both sensual video.

Teaching Design Requirements. Although only a short micro lesson a few minutes, but also need to design good teaching, good micro-lesson should be orderly, haphazard and casual micro and micro-lesson course is the concept of apostasy with Chi.

For Objects: Students do not micro-lesson students scientific segment corresponding to different knowledge and ability of micro-lesson should not only learn science segments, respectively, but also have the same segment to adapt to different levels of learning science students, such as mathematics with a knowledge, for different levels of students, teaching methods and the content should have differences, individualized teaching, which is consistent with our philosophy of micro lesson.

Comply with the cognitive process: design good micro lesson should be gradual, not leaps and bounds, cognitive styles of students of different ages is a great difference, for younger children, in particular (multi-map, animation, video) knowledge for them more acceptable for middle school children, cognitive style has evolved to more acceptable abstract knowledge, imagination can give students space to think, such as high school language, can cultivate more scenarios, but for low-grade children , cultivate scenario might have distracted.

"Pause" for students in lower grades are less desirable, and for high school students, appropriate "pause" is very necessary at this time to instill knowledge of students is clearly inefficient, self-knowledge is efficient Thoughtsconstructive.

If the object of learning for teachers, since the memory ability impaired, you may need to repeat many times, in order to keep in mind. And because the curing ideas, new things have a certain buffering process, content presentation, when the point of view, the transition should be properly smooth, slowly.

Several Commonly Used Methods of Making Comparative Analysis of the Micro-Lesson

First, the External Video Capture Tool (Blackboard or Whiteboard Camera). Tools and software: the camera, blackboard (whiteboard), chalk, teaching other presentation tools

Methods: The teaching process synchronization imaging

Description of the process:

1, for the micro-class theme, detailed instructional design form lesson plans;

2, expand the use of the blackboard teaching process, with the portable recorder filmed the entire process;

3, simple video post-production, can make the necessary editing and beautification.

Advantage: You can record pictures of teachers, teacher lectures according to daily habits, habits without changing the contents of the screen with the teacher on the blackboard synchronization;

Inadequate: the need for specialized studio environment, the high cost of equipment and the environment, people need to work together to complete micro lesson shoot video, inefficient, require professionals with post-editing.

Second, the Simple Portable Video Capture Tools (Cell Phones, Cameras White). tools and software: video camera phone, a dozen white, a few different colored pens, lesson plans related topics

Use a portable imaging tools combined with pen and paper calculations, the teaching process of writing to record

Description of the process:

1, for the micro-class theme, detailed instructional design form lesson plans;

2, pen on white paper to show the teaching process, can draw, write, tag and other acts, with the help of others, the phone will use the teaching process filmed. Try to ensure that the voice clear and stable, the calculation process logic is strong, clear and understandable answers or teaching process.

3, you can edit it if necessary and beautification.

Advantage: tool readily available

Inadequate: recording results rough, poor sound and picture effect, only the performance of handwritten content, cannot achieve a variety of other effects

Third, Screen Recording (Screen Recording Software PPT). tools and software: PC and a headset (with microphone), video screen recording software Camtasia Studio and other software, ppt software.

Methods: ppt presentation a screen recording, complemented by recording and subtitles.

Description of the process:

1, for the selected topic of teaching, teaching materials and media gathering material, making PPT courseware;

2, On a computer screen at the same time open the video screen recording software Camtasia Studio and other software, teaching PPT, who coached with a good headset microphone positions and adjust the volume, and adjust the position and recorded good PPT interface screen interface, click " record "button to start recording, who coached the side to explain side demonstration, marking tools can be used with multimedia or other software or material, try to make the teaching process interesting.

3, After the recording is completed the necessary instructional video processing and beautification.

Advantage: relatively quick and easy to record micro lesson, you can achieve on a personal PC

Inadequate: Camtasia Studio Software application is more complex, it does not support direct handwriting to achieve handwriting software needed to install and start supporting handwriting device, a certain lack of specific teaching applications.

Summary

This paper describes the classes defined on the basis of micro, micro-class production processes and related considerations are summarized, and then making several commonly used micro-lesson methods were compared for the production of micro-lessons provide a reference related personnel.

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