The Content Analysis of the Domestic Research on Micro-lecture works

Qianqian Ren¹, a, Zhi Zhang²*

¹,²School of Physics and Microelectronics, Hunan University, Changsha 410000, China.

¹1573116909@qq.com, *zhangzhi@hnu.edu.com

Keywords: Micro-lecture; Content analysis method; earning resource; interactive.

Abstract. The arrival of the micro era and the development of educational information, micro lectures have been more and more attention. By adopting content analysis method to Chinese second micro lecture contest, Foshan city schools excellent micro lecture broadcasting platform to do in-depth analysis, from the micro lecture types, production methods, learning resources, teaching mode, presentation mode of the five dimensions, the development status of the micro lecture in China and existence of the problems are summarized. From the increase of learning resources, the overall design of the system, enhanced interactivity, increase controllability, the article puts forward several future development of thinking and suggestions.

1. Introduction

The arrival of the micro era and the rapid integration of new information technology and education, are changing the way of communication between teachers and learners. Since 2011 Tiesheng Hu introduced the word "micro lecture", and held the first session of the Foshan primary and secondary schools excellent micro class contest in Foshan, China's Micro-lectures have sprung up in general, rapid development. Until now the micro lecture has been developed for five years, the work of micro-lecture has not only developed rapidly in primary and secondary schools, it is more popular in Vocational Colleges and universities. With the characteristic of dapper, variety forms, and easy to expand, micro-lectures now meet the learners' requirements of fragmentation and autonomous learning.

2. Research design

2.1 Research method

At present, there are kinds of micro-lecture works on micro teaching platforms. How does the development status of micro lecture on each platform, how to continue to develop it, which require us to the current micro-lecture works for in-depth research and analysis. This paper uses the method of content analysis as the main research methods. The micro lecture works on China's second micro lecture competition, Foshan city schools excellent micro lecture broadcasting platform are compared and analyzed, in order to sort out the current situation of micro lecture, summarize the micro lecture types, production methods, learning resources, teaching mode and presentation mode.

2.2 Object of study

The object of this paper is China's second micro lecture contest, Foshan city schools excellent micro lecture broadcasting platform. Taking the entries as the research object, taking the playback of the micro lecture as the condition, using the method of stratified sampling, 514 samples are taken.

2.3 Research coding

In "China's first school of micro class contest review", the author puts micro-lecture category design for micro-lecture types, production methods, auxiliary resources and teaching design. Referencing category of its design and combining with own understanding and the direction of research, the research category of this paper is divided into micro-lecture types, production methods, curriculum resources, presentation mode, teaching mode. Each of micro-lecture works in the sample is watched, analyzed and classified according to the contents of the coding system.
3. Research results and analysis

3.1 Micro lecture types

In this paper, according to the division of Tiesheng Hu teacher's Micro lecture, the micro lecture types are divided into: teaching types, problem solving types, question answering types, experimental types, activity types. Can be seen from the figure, the teaching types have 261 (52%), the proportion of the largest. Teachers use traditional methods to explain the content of the analysis, teaching. Activity types have 126 (25%), which show a variety of ways, such as learning origami, learning to write a note, writing a composition. Question answering types have 18 (4%). Learners find problems from the life, or the students have the problem for the beginning so that learners and teachers together find the answer and answer doubts. Problem solving types have 60 (12%), the consolidation of the contents of the chapters and improve, to answer the questions that students are prone to. Experimental types 33 (7%), the teacher in accordance with the steps of the experiment to shoot the experimental process, so that students have a certain understanding of the experiment. Especially rural students, because their experimental environment is relatively simple or there is no experimental conditions, these courses allow students to be familiar with the various aspects of the experiment and the experimental device, to cultivate their interest. It can be seen that although it is the information age and the media teaching methods varied, teachers still like to use the traditional way of teaching.

3.2 Production method

Micro lecture as a new teaching form, its resources production modes are varied, including the original traditional classroom renovation, reselecting the mobile phone or DV tools in the process of shooting and production, screen recording software, Khan Academy courses recording mode and software synthesis. According to the differences in the production of micro lecture production micro lecture production methods is divided into: film type, recording type, software synthesis and hybrid micro lecture. The distribution of their various ways of making is shown in Fig.

3.3 Learning resource

Micro video is the core of the micro lecture resources. Micro lecture does not only contain micro video, but contain other micro lecture resources. According to the micro lecture resources division elements of Hu's and combining with existing resources on the platform, this article divides the learning resources into micro courseware, micro lesson plans, micro reflection, micro practice, micro review. The distribution of curriculum resources is shown in Fig.

Learning resources in our micro lecture learning is very important. Just imagine if you watch the video, do not understand or need to consult the local still go to see the traditional teaching materials, it does not match with the micro class, then you cannot find the answer you want. From this a little vision we can see that the micro lecture should be a whole system, and not just we are now on the micro lesson platform with a special emphasis on micro video.
3.4 Teaching mode

In a section of teaching activities, usually more than one kind of teaching mode, this paper mainly uses the main teaching mode in the micro lesson as the statistical object. From the statistical results, we can see that there are 210 (41%) teaching demonstration works and 188 (37%) problems / situations, which can be attributed to the teaching mode based on teaching. This model accounts for a larger proportion in the micro lecture works, which can be seen most people still use the traditional teaching mode before the modern teaching media. This kind of teaching mode is easy to ignore the personality differences between learners.

3.5 Presentation mode

According to the way of presentation of the teaching resources in the micro video, the presentation can be divided into teaching courseware, multimedia materials, software tools, and other. From the figure, 38% (190) of teachers use teaching courseware, including PPT, flash courseware. This way of teaching courseware is mostly the blackboard content from traditional PPT form, the lack of teachers' body language, not like the real classroom that timely understanding of student feedback. 45% (223) of teachers use multimedia including image, voice, audio and video. Using appropriate multimedia materials can create a good learning environment for students and mobilize the enthusiasm of the students, so that students can easily integrate into the classroom. 7% (36) of the teachers use software tools, including geometric, sketchpad mind map and QQ, which can help teachers to visualize the abstract problem.

![Fig. 5 Presentation mode column chart](image)

4. Thinking and suggestion

4.1 Thinking of micro lesson

With the arrival of the micro era, because of short time, less content, a variety of learning methods and other characteristics, micro lecture quietly enters the field of education. Teachers in various stages are more and more mature in the research of the micro lecture. But through the research of the works of the micro lesson, we can see the hidden problems in the micro class. Micro lecture as a new teaching media how to apply to the classroom, how learners with their own situation to improve learning efficiency, how teachers will be integrated with the traditional classroom, which are worth pondering. In the summary the micro lecture works are based on micro video as the center, the extreme lack of learning resources, which is now the bottleneck of micro lecture. How to integrate the elements of micro teaching into the teaching design, how do teachers attach importance to learning resources and integrate learning resources into the classroom, which are really worth thinking about. It can be seen that the interaction between teachers and learners is very little. After watching the video, the learner finds out the weaknesses and problems in his study, but how to deal with them.

4.2 Suggestions for the micro lecture.

4.2.1 Carefully design learning resources, so that the micro lesson becomes a systematic learning resource and give full play to its role

Micro lecture is small, but it is very useful. So we should pay attention to the integrity of the construction of micro lecture resources. Just imagine if there is no micro teaching materials, micro exercises, micro examination and other learning resources, how to fully use the micro lesson and the role of micro lecture to play to the extreme. In addition, China's second micro lecture contest works in construction pay attention to the amount, which of playing more than one hundred works only are 479, and overall micro lecture volume more than 40 thousand. The overall proportion is
very small. The micro lecture itself is relatively short; content is just a knowledge point; it is
difficult to extend; which requires us to design the learning resource for learners to have a thorough
understanding of the system.

4.2.2 Highlight the teaching design of the micro lecture; distinguish the difference between the
real classroom teaching and the micro lecture

Although the micro lecture can be applied to the classroom teaching, it has the essential
difference with the classroom teaching. Micro lecture is in the virtual teaching environment, the
teaching object of more extensive, which pay attention to the psychological characteristics of the
learners, the teaching process of novelty, personality, which require us to be more careful design
micro lecture.

4.2.3 Enhanced interactivity, so that students can control the video in the class and the micro
lecture more personalized

Through interaction, the learners find their own problems. After each machine interaction
problem, we can set up some materials supporting video or learning, a step by step to guide the
students to solve the difficult problem. Each learner's base is not the same, whose some very poor
can may not be too clear after watching the video on the need to look at it again. So we can set the
number of times which is watched in the video. Today's micro lecture, mostly teachers have been
teaching, learners passive acceptance, without their own thinking space. And this kind of control of
micro lesson can better reflect the personalized learning.

References


grade seven, Education information technology.2016.