Exploration and Development of Micro Lesson Math’s Teaching Model in the Seven-year Educating Program

Lin-Jing YAN1,a,*
1Beijing Polytechnic, Beijing, China
ayljustb@126.com
*Corresponding author

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Abstract. In the Seven-year Educating Program, Math’s teaching content design should not only pay attention to combination of theory and application, but also different learning needs of students, "micro lesson" auxiliary teaching mode becomes to be necessary. In this paper, carry out demonstration from many aspects of Seven-Year educating program, such as design and implementation features of "Mathematics Course", development necessity of mathematics "micro lesson", etc. put forward some constructive suggestions on development of "micro lesson".

Introduction

"Micro lesson" means "micro teaching lesson", refers to video as main carrier, carried out process of teaching and learning around knowledge points(key points, difficult points, doubtful points) or teaching links[1]. As "micro work", has characteristics such as network sharing and online reproduction, has good mobility, especially suit to learn and review or supplement after class consolidation for students. Because of short and interesting design features, quickly attract attention of many students, to certain extent, mobilize students learning enthusiasm; Micro lesson has been more common in middle school.

Seven-year Educating Program refers to Beijing Municipal Education Commission 2015-2017 high-end technology skilled personnel training project, The first two years is basic education stage of seven years through training, regard less students characteristics or teaching contents is in line with high school, but different, through a year teaching practice, front line teachers find, micro lesson assistant teaching mode is more necessary and practical than ordinary high school, micro lesson is suitable to develop and explore.

Organization of the Text

The Background and Characteristics of Seven-year Educating Program

Seven-year Educating Program refers to: in order to adapt to capital's economic and social development, meet needs for high-end technical talents of capital industrial transformation and upgrading , from 2015, support cooperation between part of demonstration senior high school, vocational schools, colleges and universities, domestic and foreign large enterprises, etc. select development type major, to recruit junior high school graduates, completion cultural basic courses of high school, accept higher vocational education and undergraduate education. The model of vocational education has reached a certain degree of vocational undergraduate.

Seven-year Educating Program has two obvious characteristics:

(1) Program admissions object is Beijing school, students examination is better than medium partial. Some of them are high grade in exam, provide intelligence support for training project implementation.

(2) Seven-year Educating Program is co-culture for demonstration high school, outstanding quality colleges and universities, foreign enterprise cooperation, both intellectual support and
technical support. In such educational background, reform and practice of lesson teaching have become necessary.

"Mathematics Course" Design and Implementation Characteristics of Seven-Year Educating Program

Seven-year Educating Program objectives is to develop high-end technical skills talent, whether basic courses and specialized courses pay more attention to combination of theory and practice, emphasize professional skills on solid theoretical foundation[2]. Based on this characteristic, mathematics curriculum design and implementation according to following characteristics:

1. teaching content is modular, pay attention to theory and application combining;
2. teaching content through chemical, avoid repetitive teaching in high school and college;
3. teaching process, pay attention to culture, improve students' Autonomous Learning ability.

The Necessity and Feasibility of Mathematics "Micro Lesson" Development in the Seven-Year Educating Program

1. "Micro lesson" teaching mode is suitable for students learning characteristics of Seven-Year Educating Program. Seven-year Educating Program personnel have a variety of export options, such as to attend university entrance exam, to study abroad, to study through, which have very high requirements for contents of mathematics curriculum design, in order to ensure learning needs of different students, should design and develop micro lesson assistant teaching mode, in order to ensure basic content, to design elective content for college entrance examination, let students take into account school-based learning and social assessment.

2. "Micro lesson" teaching mode is suitable for Development of basic education of Seven-year Educating Program. The reason of micro lesson popular in primary and secondary schools, is that teaching content nature is relatively simple and independent, a lot of content directly from process inquiry of life, produced lively and interesting. Seven-year Educating Program basic education phase is similar to middle school education, so it can be referenced, but also has its own characteristics. Seven-year Educating Program, pay more attention to cultivation of skilled talents, which requires students can apply what they have learned, pays close attention to inquiry process in learning, so appropriate to join the inquiry process module in micro lesson design, and practicality strong case module as supplement. Because of "experimental" characteristics of the two modules, it is more suitable to be made into "micro lesson", which enriches and develops student's learning resources. Therefore, "micro lesson" is fully able to achieve better results in basic education teaching through advantages of basic education stage.

3. "Micro lesson" auxiliary teaching mode is conducive to improve students' learning enthusiasm, cultivate students' autonomous learning ability. Seven-year Educating Program has a special attraction to students, that is, you can choose to avoid college entrance examination. But this does not mean study relaxation, but transformation of learning and teaching ideas, if effective combination, will open up new talent training model. In teaching process, need to strengthen students' autonomous learning ability, so that learning become to be students themselves really interested in things, but also needs students to arrange their own time. "Micro lesson" auxiliary teaching mode can be effective for this goal booster[3]. Class under self thinking and sharing thinking will become norm in teaching and learning, is better for high-end technical and technical personnel training goals.

Combined with "Micro Lesson" to Carry out New Model of Mathematics Teaching Reform

First, "micro lesson" of mathematics curriculum in the Seven-year Educating Program must have its own characteristics, and must pay attention to the cultivation of students' ability. Follow modular approach both in design and implementation of "teaching contents", Innovation, specialization and process teaching reform are more important. That is to say, according to the different characteristics of teaching content, we need to sort out the contents of the teaching, and fully demonstrate the process of inquiry learning, In order to achieve the purpose of combination of Teaching content and life and specialties. So that aroused the interest of all. Let the micro lesson meet the different needs of
students and adapt to the development of different students. Secondly, the development of "micro lesson" can make full use of students with smart thinking and creative, brains and hands-on together, to mobilize the enthusiasm of the students' independent development, we can encourage students to develop their own creativity and make excellent micro lessons. Let the lesson become lively. Finally, the development of micro lesson requires collective wisdom and practical experience. Main reason is: excellent micro lesson teaching fragments need the collective wisdom and practical experience as a support requires repeated optimization design the teaching plan and repeated practice. Not a person can be completed in a short time.

Summary

In summary, micro lesson is a suitable auxiliary teaching mode for mathematics teaching of Seven-year Educating Program, although curriculum development still needs time, but it will provide power and support for teaching and ability improvement because of its unique advantages.

References

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