RESEARCH ON MICRO-LECTURE CONSTRUCTION SYSTEM BASED ON "DO IT" CONCEPT IN COLLEGE TEACHING

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ABSTRACT: *With the rapid development of the information age and technology continues to penetrate in the field of education, micro-lectures have developed rapidly at home and abroad as an emerging way of e-learning. The characteristics of digitalization, fragmentation and popularization have played an extremely significant role in college teaching. so, the design and development of micro-lectures has become a hot topic in recent years. The content of this research innovatively puts forward the concept of "Do it". From the perspectives of teachers and students, it guides the construction of an efficient new micro-lectures system from the perspective of pre-course, in-class and post-class aiming to further promote the micro-lectures system application in colleges and universities teaching.*

KEYWORDS: Micro-Lecture, College Teaching, "Do It", Self-Learning

INTRODUCTION

The definition of Micro-lecture

The micro-lecture [1-3] came from Khan Academy in the United States in 2006 and David Penrose clearly proposed the concept of Micro-lecture for online learning and mobile learning in 2008. In 2011, the TED conference opened a TED-Ed micro-lecture channel for educators on its official website in which micro-lecture video was released on the YouTube platform to provide " Lessons Worth Sharing ". In many countries, the research and development of micro-lecture have different focuses and resources and the organizational structure of the curriculum is also relatively loose. Many universities share the learning courses of video through the school's website and also many uses third-party software to provide and integrate resources through the third party Such as Apple's itunes, Facebook or YouTube etc.   In China, Professor Hu Tiesheng [4-6] took the lead in proposing the concept of "micro-lecture" emphasizing that micro-lecture is a micro-quality learning resource that combines subject knowledge points with a certain teaching element and link. It is based on teaching video and also covers other expansive resources related to teaching in order to adapt to contextualization, webpage, openness, structure and teaching environment. Micro-lectures are popular among young people because of their shortness and precision, combination with multimedia. Many colleges and universities in China have begun to apply micro-lectures combined with traditional teaching to reform the conventional education system. At the same time, some popular micro-lecture platforms have also appeared on the Internet such as Baidu lectures and Sina open classes.

The present condition of Micro-lecture

The construction of micro-lectures in China is still in its infancy and disorderly developing stage. There are mixed, chaotic and many similar contents which causes the waste of micro-curricular resources. Most of them are only in the form lack of connotation and ideas In some cases, The theme is too large and the content is too much so that it doesn't allow learners to grasp the most important and valuable learning content in the shortest time with the most attention which is opposed to the concept of fragmented micro-lecture learning. The lack of "learning-centered" instructional design in micro-lecture setup and teaching has become a move for electronic textbooks and the use of advanced information technology has not been fully utilized to increase the appeal of micro-lectures. 'The tasks of students' in micro-lecture learning are not clear, the supporting exercises are incomplete and the combination of online and offline teaching is not high. The micro-lecture lacks an effective communication feedback evaluation system and there is no corresponding improvement mechanism which becomes the bottleneck for the further development of the micro-lectures. In particular, the professional micro-lecture study group is not standardized and it is difficult to become a complete system. Also, the students' enthusiasm for learning is not high. For certain disciplines, many types of micro lectures are not available especially lack in focusing on the basic course of disciplines. The micro lectures with core engineering and professionalism is also poor in quality.

Students who expect to acquire professional knowledge and skills will benefit less. In short, the combination of micro-lectures and reform in conventional college teaching has become an inevitable trend in the information age education field but the current micro-lecture teaching level still needs further development and improvement.

The development trend of Micro-lecture

The connotation development of micro-lecture. From the short and precise requirements of the form to the close-knit knowledge points of the content It not only must have the "content visualization" of knowledge and skills but also the training of "visual visualization" and "exploration visualization".

The standardization and individualized development of micro-lecture: Teachers should be encouraged to produce micro-lectures that reflect their own characteristics and forms in a certain standardization (micro-lectures time, teaching language, target course, etc.), and use of advanced information technology to enhance the micro-lectures and truly achieve milestones.

The systematic development of micro-lecture: A knowledge point of the micro-lecture should be extended to a course and so the students can systematically learn to master a number of knowledge points in the whole course, which plays in teaching from small too big and leads to quantitative change to qualitative change in effect. The role of micro-lesson to the extreme.

The practical development of micro-lecture: Micro-lectures should be set up from just taking part in the competition to actually considering the student's needs. The true value of micro-lectures is applied to teachers' classroom teaching and students' self-learning activities. That

teachers make or select excellent micro-lectures which should be based on their own teaching courses and students' demands to assist in offline teaching. Students can choose freely micro-lecture to self-study for better grasping the key points of knowledge and also add more to expand the learning content which in turn plays a role in teaching and learning. Fourth is the new concept of micro-lectures in college teaching.

The new concept of Micro-lecture in college teaching

Under the premise of "study-centered" micro-lectures construction, we build the "Do it" concept. Concept: Design, Optimization, Interaction, and Themselves and then guides the establishment of the circular teaching mode which have the micro-video as the core and get teaching plans, courseware, tasks, exercises, carriers, feedback evaluation, reflection of the seven-phase single-phase assistance and the mutual promotion.
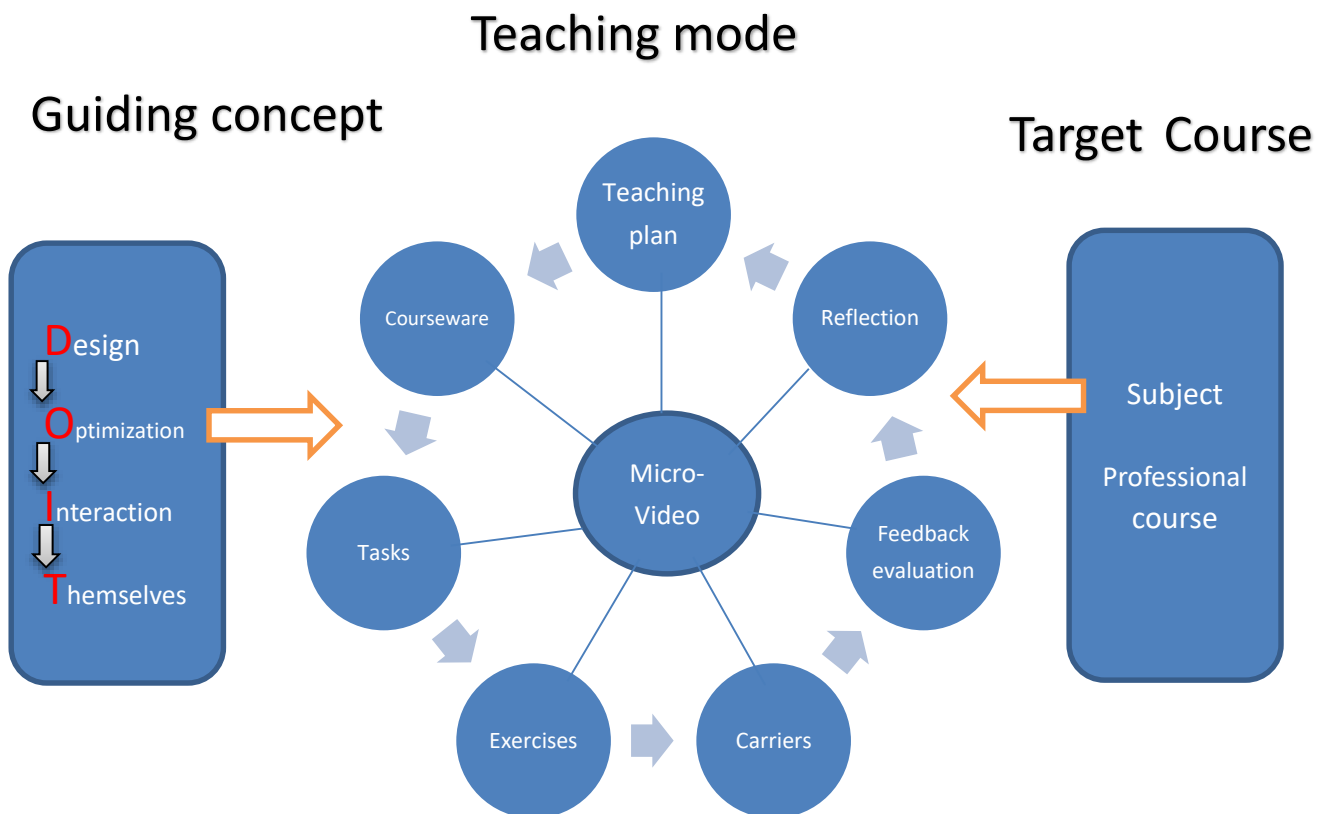
Design

The micro-lecture production should be selected   based on following aspects such as the corresponding teaching content, the overall design of the teaching plan, courseware and teaching process, adhering to the principle of "shortness and precision" and establishing the "learning-centered" teaching design concept to set the teaching task, supplemented by targeted

micro-lecture platform and offline exercises, test design and activity settings, to deal with the personalized, transient and offline learning complement and expansion of micro-lecture learning. Then, through the feedback evaluation of the students, the teaching plans, courseware and teaching tasks will be re-improved. Design is not a once-in-a-lifetime and is reflected in many aspects of teaching. In general, the micro-lectures are connected in an advanced way from easy to difficult, and several knowledge points in the whole course are self-contained. In the end, different types of courses will be divided into categories to build up the micro-lecture platform system following the construction guidance of "top design" and "system planning".

Optimization

The most important part of the micro-lectures is the optimized combination of teaching media (internet, traditional media courseware, courseware animation, etc.) which is an advanced step in micro-lectures design. Optimization can change the way the classroom is presented, and makes the classroom more attractive. It pays attention to the time of reasonable allocation of each teaching link with the help of micro-lectures and strives to make the teaching link compact and the content detailed and appropriate, so that the learning process of the micro-lecture is relaxed. Consequently, the teaching process is more inspiring and inductive in which students are more interested. At the same time, it explores the impact of information technology on the revolutionary nature of micro-lectures, and optimizes the educational process and effects, such as VR technology, 3D experience, online live broadcast platform, WeChat and so on. For the micro-lecture platform system, the curriculum needs to be standardized and the choice is retained.

Interaction

Excellent micro-lecture teaching requires sufficient communication and interaction: 1. To strengthen the interaction between micro-lectures teaching language and multimedia. 2. To strengthen the interaction between teachers and students. Teachers should learn to change their thinking and role and the language of teaching should be more personalized. Teachers need to arrange questions and exercises to supervise student learning, and adjust teaching from student feedback and evaluation. 3. To integrate the large platform system, it can generate learning diagnosis report according to the questionnaire survey situation and you can also give students experiential learning and then the feedback to the micro-lectures construction to realize the crowdfunding micro-lecture construction system. Implementing a large platform system to achieve big data intelligent statistics and management, and conduct statistical analysis on students' learning paths, behaviors, achievements and existing problems. which can form stage learning reports and suggestions, and reveal relevant micro-lectures and learning resources.

Themselves

Self-motivated learning requires micro-lectures to achieve humanized operation, which is both a student's teacher and a learning partner. Through the micro-lectures, students can provide pre-school preparation or assist the classroom to carry out the flipping class. To promote the transformation of ideas, micro-lectures are transformed from a teaching resource into a high-

quality digital learning resource. The role of teachers in micro-lectures is to guide the students. According to the different abilities of students, different micro-lectures are provided and gradually establish the deep application stage of student's effective learning experience, construction of self-knowledge system and the formation of problem-solving ability. The ultimate goal of the micro-lecture platform system construction is to play a huge role in formal and informal learning, on-campus and off-campus learning, offline learning and online learning as well as ubiquitous learning and lifelong self-learning after graduation.

SUMMARY

We innovatively put forward the concept of "Do it": Design, Optimization, Interaction, and Themselves. From the perspective of pre-course, in-class and post-class, it guides the construction of an efficient new micro-lectures system from the perspectives of teachers and students aiming to further promote the micro-lectures system in colleges and universities application in teaching. It's innovative that we guide the establishment of the circular teaching mode which have the micro-video as the core and get teaching plans, courseware, tasks, exercises, carriers, feedback evaluation, reflection of the seven-phase single-phase assistance and the mutual promotion. In the teaching of colleges and universities, this can be combined with specific subject-based courses and professional courses to construct a micro-lecture teaching system with professional characteristics and to establish a micro-lecture platform system which is the inheritance, enrichment and development of the original micro-lectures system.

Acknowledgements

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