

Instructional design for the Micro lecture

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Keywords: Micro lecture, Instructional design, Pedagogy.

Abstract. Micro lecture is the new pedagogy in the internet and big data era, where micro media clips remain its essential parts. There is a discussion for the instructional design for the micro lecture. Included are discussions of (1) background information on micro lecture, (2) needs study, preliminary planning and facilities (3) micro lecture platform building and evaluation.

1 Introduction

“Micro-lecture/teaching” is proposed for the first time in China in 2011 with its core concepts changing from the original teaching resources that focus on a brief pedagogic process or aspect to a complete pedagogic progress that centers a certain learning point or process. Now its core concept lies in that a new online media lesson which solves one learning problem by various learning modals in numerous situations.

"Video as the main carrier", "new online network media" includes the whole process of traditional teaching methods: needs analysis, instructional design, courseware, reflection, drills and feedback. Therefore, there are five different dimensions for micro lecture design. Instructors should not only to take into account the learning space, learning methods and mode of operation, but also to consider the content of micro class carrier and ecological composition. The ecological structure is based on the network, a variety of resources, not limited by time and space, and support a variety of learning methods of micro curriculum ecological integration.

2 Instructional design for Micro lecture

Micro lecture is a new teaching method in the Internet plus and the big data era, while the existing research focuses on constructing more micro lecture theory. This paper mainly discusses the instructional design of micro class. We start from the needs of micro class teaching to discuss the tools and platforms of the construction of a micro class as well as pedagogic methods and models.

2.1 needs analysis

Learners develop their ability to solve and analyze problems using scientific research methods and independent innovation ability. So they need to make a variety of choices in their teaching activities according to their own ability and levels, and find their own way of learning. Teaching activity itself is a multi-dimensional and open interactive activity. Learners can meet the learning needs in the autonomous learning mode and personalized learning mode. The traditional curriculum teaching is based on teachers, and the learning methods and learning process are teachers oriented, the whole process is fixed and pre-set. However, the new micro lecture is based on students, regardless of learning methods or learning process is the leading student. Table 1 is a contrastive study of the two patterns of traditional teaching and micro teaching.

Two modes	traditional teaching	micro teaching
Teaching objectives	curriculum to acquire knowledge	a certain knowledge point To improve the ability
The main role	teachers centered students listens	students centered supplemented by teachers
The teaching mode	teachers talk Instilling teaching,	students' independent choice autonomous Learning
Evaluation of results	final outcome evaluation	Evaluation of process based on final outcome evaluation Judge by the degree of progress

Table 1 the two patterns of traditional teaching and micro teaching.

2.2 Multi terminal Hybrid Micro teaching platform

A complete multi terminal Hybrid Micro class teaching system includes: PC end service + mobile terminal service and micro class teaching platform.



Figure 1 multi terminal Hybrid Microteaching system (picture source :Baidu pictures Micro teaching tool)

Micro class teaching platform is built by teachers with they make micro courses, and push the micro lesson teaching platform through PC end server + mobile server. Students log into the micro class teaching platform and enter the class space selecting the learning content from the teaching resource library. By the background statistical analysis, teachers and students get the immediate feedback of the learning process.

2.3 Teaching objectives of micro lecture

There are five dimensions for a certain micro lecture(College English): language skills, language knowledge, cultural awareness, emotional attitudes and learning strategies. In order to improve students' comprehensive language ability, the teaching objectives of College English can be refined into five interconnected parts as they are shown in Figure 2. See Figure 2 curriculum objectives structure.

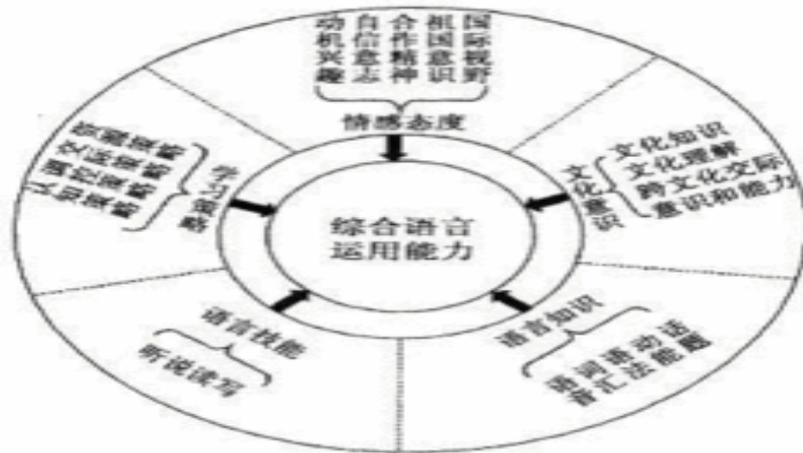


图 2 课程目标结构
Figure 2 curriculum objectives

3 Conclusion

Whether there is the traditional teaching or the new micro teaching, instructional design plays a highly significant role. The instructional design should be based on different needs of students, and pay attention to novelty and elicitation in order to achieve a better teaching effect. Teaching methods should be diversified, so as to stimulate students' interest in learning, cultivating learners' positive thinking, mobilizing their enthusiasm and initiative to efficiently develop their creativity and critical thinking ability.

Acknowledgement

In this paper, the research was sponsored by the Ministry of Education Social Science Youth Fund for Xinjiang Uygur Autonomous Region of China (Project No. 17XJJC740001).

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