The construction of resource of educational technology program design based on MOOC

Cao Liying, Yu Helong, Chen Guifen, Yang Tingting

College of Information and Technology Science, Jilin Agricultural University, China, 130118

E-mail: caoliying99@163.com

Keywords: information technology; network; MOOC; interactive

Abstract. according to the characteristics of current higher education, the status quo and the network development, the development of the MOOC course has been imminent, online curriculum resources by the user is completely open, self-organization, has been generally recognized learners the world. In the current domestic micro and teachers in prevails, and micro situation course resources website under the less, taking MOOC courses construction design concept of micro class website, is beneficial to the popularization and development of the application of micro class. This article absorbs the characteristics MOOC course construction, design for the construction of colleges and universities are open, flexible, interactive strong comprehensive function of educational technology resources website.

Introduction

In recent years, with the development of mobile networks and Web 2 technology, application and practice of "micro class" has spread all over the country, many teachers have begun to try homemade micro class video, all kinds of school have also launched their own "micro class" learning video, the students also begin to actively search on the web resources related to micro class and their own courses, colleges and universities should seize the "micro class" popular opportunity, actively according to the characteristics of professional resources of the school, to build the school based digital library resources, network teaching platform construction, deepening the information technology teaching application in University classroom. Therefore, this paper intends to use for reference the international popular MOOC construction idea, try to design suitable for college course teaching of "micro class" resource website.

The summary of educational technology resources website design

Micro class is currently the main educational technology resources, "micro class" was originally "micro teaching video lesson" abbreviation, in microteaching video as the core, including matching and teaching courseware, lesson plans, micro micro micro micro micro practice, reflection, evaluationsupport and expansion of the resources, so as to form a dynamic resource generation and interaction teaching application environment [1].

Micro curriculum with definite teaching objectives, contents and dapper, concentration showed small course to solve a problem, with fast food, simple, practical, diversification, poly characteristics of coking, intelligent, entertainment and other distinctive, more suitable for the network platform ofsharing and communication, with the rapid development of mobile networks, the popularity of smart mobile phone students, micro course can effectively supplement the teachers "teach" resources and students "learning" resources. Therefore, colleges and universities "micro construction of the course of" web site on one hand can improve teachers' professional development level, promote the reform of college classroom teaching, on the other hand can help students to study independently, to stimulate students interest in learning, improve learning efficiency.

Enlightenment of MOOC concept on micro course resources website design

MOOC, A Massive Open Online Course is English initials, Chinese translated as "massive open online courses", Wikipedia explanation: MOOC is the network curriculum consists of a large number of participants through the Internet release and free and open. In addition to providing traditional curriculum materials, such as videos, reading, and problem sets, MOOC also help students, professors and assistant professors to build a network of interactive community [2].

MOOC curriculum advocates the sharing of resources, brings together a large number of users thought to acquire more knowledge, this idea comes from the Unicom main

Constructivist learning theory, should be relatively and basic viewpoints of connectives, Downs et al. Summed up some basic principles of MOOC course.

(1) Aggregation. In the traditional curriculum, learning content is prepared in advance by the teacher. And in the MOOC curriculum, the greater part of

Content is a dynamic collection. The course provides a collection point formassive content distribution in all over the Internet, these contents will bethrough the Webpage or course of communication (Newsletter) and other forms of polymerization to provide curriculum user. These content is endless, the learner may not read all the content, should they choose to learn the content according to their own interest.

(2) Mixture. In the learning process of learners will content and course curriculum content of the outside are mixed with each other, the learner's own

Resources and curriculum resources mixed. The usual approach is to write a blog, through social bookmarking recording and sharing of new resources, participate in the discussion forum, use Twitter comments and so short.

(3) conversion. According to the learners' own goal conversion polymerization course resources and mixed resources. The aim of the course is not

Is to enable the students repeat courses of the contents, but encourage them to innovate on the basis of. Learners can course based on existing knowledge according to their own understanding and the idea of compiling new content.

(4) to promote the sharing of. Learners should all positive and courses of other learners and the course of sharing their creation,

Mixed or diversion of creative and content, cause more feedback and comments. Share the content may be the new resources, new ideas, new ideas etc.. The value of these content in the area will also be the course coordinator polymerization into the curriculum in [3] communication.

The operation mode of MOOC course

This process is to enlighten the micro class resources website design, micro course resources website should not just a resource release, under the

Load site, more attention should be paid to the interaction of teaching and learning, to provide exclusive forum, free resources for teachers and students to share permissions, flexible resource sharing mode, into a set of resource sharing, community discussions as one of the teaching platform.



Fig 1 teaching resources of the network model

Based on the MOOC concept of "micro course" web design and analysis

- (1) the page style design. "The design of micro class" web interface should be in a concise, beautiful color, text, pictures, video, using a style to agree, with a clear and orderly. The web page to light based, create a relaxed, comfortable feel of the page.
- (2) the system function structure design. Website function module mainly includes: Web help system, resource center, forum, retrieved five big module, background management system.
 - (3) The user role permission

According to "the use of object micro class" website, web users will be divided into four categories: teachers, students, anonymous users, the site administrator.

Anonymous user permissions include retrieval, query, access to resources, you can message evaluation to access the resources, but also can be obtained through the web site message board support.

(4) Micro class website operation process

Design through the function, teachers can make full use of the MOOC concept of curriculum construction using micro classroom lesson teaching website, before the start of classroom teaching, teachers can first through the micro course resources website published course related information, including the use of the forum dedicated section, personal micro-blog, push email and other means.

Conclusion

Micro course resources website to assist teachers in the classroom teaching through this design, can make the position and function of teachers change a lot, more play curriculum initiator and coordinator role, teachers need to pay more than the traditional classroom teaching more time and effort, hand to make courseware and curriculum more auxiliary materials, recording micro teaching video, on the other hand also need teacher adopting various kinds of encouragement means, continue to stimulate the initiative of students, urge the students independent learning. At the same time, students are no longer as passive learning object; need to actively participate in teaching.

Design of micro course resources website based on MOOC concept, will resources construction authority completely, by visitors, educators, learners to jointly participate in the construction of resources, by the person responsible for the collection, constantly update the Internet excellent micro class resource links, and use RSS technology, collecting network related resources; at the same time network interaction community flexible for the teachers and students, reflects the MOOC curriculum construction idea, but in the interaction between teachers and students and information push hand there are still many details to perfect, practical work is still in progress, on the site of the message in the interaction between teachers and students, dedicated web sites using suggestions and opinions, expect to get valuable advice of students in website operation, constantly revised improved, promoting teachers and teaching reform in Colleges and Universities under the digital environment.

References

- [1] Charles M. Reigeluth; 《Instructional-Design theories and Models》, Lawrence Erlbaum Associates, Publishers; 1999.
- [2]Cynthia B. Leshin, Joellyn Pollock, Charles M. Reigeluth; 《Instructional Design Strategies and Tactics 》; Educational Technology Publications; 1992.
- [3] France Belanger, Dianne H. Jordan; 《Evaluation and Implementation of Distance Learning: Technologies, Tools and Techniques》; IDEA GROUP PUBLISHING; 2000
- [4] Greg Kearsley; 《Online Education: Learning and Teaching in Cyberspace》; Wadsworth, Thomson Learning, Inc.; 2000.

[5].Barbara Secls; 《 Making Instructional Design Decisions 》 (Second Edition);Prentic Hall ,Inc.;1998.

[6]Robert D. Tennyson; 《Instructional Design: International Perspectives》 (Vol. I: Theory, Research, and Models; Vol. II:Solving Instructional Design Problems); Lawrence Erlbaum Associates, Publishers;1997.

[7] Charles K. West ; \langle Instructional Design: Implications from cognitive Science \rangle ; Prentice Hall, Inc.;1991.