

Study on the Design and Development of Network Courses under Modern Educational Technology

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Abstract: Starting from the theory and practice of educational technology, it expounds the development trend of educational technology, the importance of the design and development of educational technology network courses, and initially explores the composition system and design and development principles of modern educational technology network courses.

1. Introduction

The expansion of contemporary information technology into the field of education has made the status of educational technology expand from the simple teaching methods to the new educational environment and educational resources, and thus caused changes in curriculum, teaching materials and teaching models, and thus the basic theory of education. The modernization has an important and far-reaching impact. The development of today's educational technology presents the following trends: multimedia. Multimedia is a computer-centric integration of technologies that process multiple media information. It is a combination of technologies that extend the way people interact with computers. Multimedia technology provides a new means of communicating information between humans and computers, including high-fidelity sounds, photo-quality images, 2D and 3D animations, and even moving images. At present, international educational technology is rapidly moving towards multimedia. Networked. The most obvious sign of the network of educational technology is the rapid development of Internet applications. The technological advantages of remote, broadband and wide-area communication network technologies on the Internet have had a profound impact on future higher education, which is not only reflected in the changes in teaching methods and teaching methods, but also in the teaching mode and A fundamental change in the education system. The research on the theoretical basis of educational technology has received people's attention. In recent years, the educational technology community has been paying more and more attention to and strengthening the research on the theoretical basis of educational technology while promoting the application of educational technology. This is reflected in the following two aspects: on the one hand, it pays attention to the theoretical basis of educational technology itself. On the other hand, it is to strengthen the application of cognitive learning theory to the practical study of educational technology. Diversification of educational technology application models. What is currently developing rapidly is the "multimedia mode" and the Internet-based "network mode".

2. The importance of developing online courses

Although educational technology has developed rapidly in theory and in practice over the past few decades, the application of educational technology is not as rapid as its own development. For a long time, media technology has always been synonymous with educational technology. The idea of media-based technology theory is still in the mainstream. So far, there are still people who are involved in educational technology and must be called computers. It seems that educational technology has left IT technology as an educational technology. In fact, the use of the powerful advantages of the Internet to promote modern educational technology and the construction of modern educational technology online courses is the most important application area for the realization of modern educational technology applications. The online course is the sum of the

teaching content and the implemented teaching activities of a certain subject expressed through the network. It consists of two components: the teaching content organized according to certain teaching objectives and teaching strategies, and the network teaching support environment. The online course construction is based on distance education. It should improve learners' interest and consciousness, and must meet the basic conditions of running on the Internet. It should also be characterized by security, stability, reliability, and fast download.

Developing modern education and constructing a lifelong learning system are an important task of educational informationization. Under the guidance of modern educational technology, modern distance learning based on campus network or internet is a new type of education with the development of modern information technology. It can give full play to the advantages of various existing educational resources. Using the best teachers to teach the most students, in line with the trend of modern education development. To achieve this goal, you need to develop a large number of high-quality online courses.

The cultivation of innovative talents is the purpose of modern education and the focus of implementing quality education. The characteristics of innovative talents are mainly reflected in these aspects: innovative consciousness, creative thinking, and innovative ability. To this end, in order to cultivate innovative talents, it is necessary to explore innovative talent training models and truly implement quality education. Kong Jianhua pointed out in the "Jiangsu Education Research" that the real "burden reduction" should be studied and explored from the cultivation of students' innovation model. (1) Reform the traditional classroom teaching mode, carry out research on the three-dimensional teaching mode; (2) carry out curriculum reform and implement school-based curriculum; (3) actively develop "network teaching", broaden students' time and space, and train students to collect, The ability to process information; (4) to explore the "problem-based" research teaching. It can be seen that quality education is inseparable from the network, and it is inseparable from online courses.

In today's world, science and technology are advancing by leaps and bounds. Our education and teaching concepts, teaching systems, teaching content and teaching methods must be adapted to the progress of the times, and education will fall behind. Although educational technology has made significant developments both in theory and in practice in recent years, it is still not enough in general promotion. Many educators have not yet applied the ideas and theories of modern educational technology well. Teaching, and even staying in exam-oriented education. How to promote modern education technology, modernize our education, and move towards a virtuous cycle of quality education? Building a modern education technology network course has become the most important method and way to promote the application of modern education technology.

3. Design of modern educational technology network course

Unlike the general multimedia teaching software, the online course is a textbook for students to use the campus network or the internet for distance learning. It not only has the characteristics of online teaching but also the cultivation of talents, especially the cultivation of innovative talents. Therefore, it has its own characteristics, first of all, it should be suitable for online communication, easy to use; secondly it is easy to use, easy to understand; and requires vivid, multimedia and so on. The design of modern educational technology online courses should also follow these principles. The modern educational technology network course consists of: 1. The content system of modern educational technology: it includes the basic concepts, theoretical and technical foundations of modern educational technology, the construction of teaching environment, and the development of educational technology resources. The application of modern educational technology: including the application of modern educational technology, how to use modern educational technology to construct a new teaching model, and the task of developing modern educational technology in schools. Learning navigation system for modern educational technology network courses: including course introduction and course learning. It gives learners a clear understanding of the modern educational technology online course. 4, the modern education network course learning tool system: including electronic notebooks. 5. Consultation and exchange system of modern education network

courses: including experience exchange, teacher mailbox, etc. 6. Open teaching environment system: including related content, software learning, and related website address. Principles of Design and Development of Modern Educational Technology Network Courses: Many online courses in the past were the simple moving of textbooks without teaching design. In theory, it is not a complete online course. The online course under modern educational technology should break through the simple demonstration mode, embody the process of constructing the meaning of knowledge; pay attention to the design of questions and answers, and improve the participation of students. Because online teaching is different from traditional teaching, it has many of its own characteristics. The design of modern educational technology online courses follows the following principles:

Modern education online courses should reflect the individualization of student learning. Students are the main body of learning. The process of learning is the process of students exploring, discovering problems and constructing meanings. Therefore, it is necessary to reflect the characteristics of students' individualized learning, give full play to their pioneering spirit in learning, and provide flexible and diverse retrieval methods. The automatic recording function of the learning path. Individualized teaching also has a friendly human-computer interaction method to improve students' interest in learning and motivation; the expression of teaching should be multi-dimensional and intuitive, which is more conducive to student learning.

The collaborative nature of learning is a hallmark of online courses. In online teaching, the roles of teachers and students have changed, not only between teachers and students, but also between students, and this communication is more direct and frequent. A remarkable feature of the computer network course is the human-computer interaction, which can realize the feedback of information. Not only can the interaction between students and machines be realized, but also the multi-directional communication between students and students and between students and teachers. Use the network for teaching and ask students to operate the computer keyboard themselves. More importantly, you have to enter your own ideas, share others' experiences, and share your own experiences. Active participation itself is to strengthen the learning effect. At the very least, we must clarify our own ideas and write our own understandings to communicate with others. This requires brains. The openness of the online course provides relevant reference materials or web sites. Multiple learners provide different interpretations and descriptions of the same learning content, interact and cooperate with each other to achieve a deeper understanding and mastery of the teaching content, and improve student analysis. Problems and the ability to solve problems. The online course should pay attention to the design of evaluation feedback, timely understand the students' learning situation, and objectively evaluate the students' compliance with the teaching objectives of the course. Because online courses are different from traditional traditional teaching, the feedback of traditional teaching can be expressed through various situations of students. Teachers can adjust the progress or difficulty of teaching in time, but the online courses are different, teachers and students are in a state of quasi-separation, so Pay special attention to the feedback design of the online course.

4. Conclusion

The design and development of modern educational technology network courses should be guided by the advanced theories of modern educational technology, the application of new computer technology, reference to a variety of materials, and constantly improve the various systems of modern educational technology network courses. In the design process, it is guided by the theory of modern educational technology, based on practice, and constantly innovating, striving to make modern educational technology online courses more suitable for students to learn. Let us improve the quality education through the development of online courses under modern educational technology, and further promote the development of modern educational technology theories and technologies.

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