

MODERN EDUCATION TECHNOLOGY WITH CREATIVITY OF CONTINUING EDUCATION

Luo Long, Liang Zhaohui, Wu Gengsheng, Yang Xiaoqin

Continuing Education School of Tsinghua University
100084 Beijing, China
jxyluol@tsinghua.edu.cn

[Abstract]

At present, the multi-media technology, network technology and satellite transmission technology, as the representative of the information technology is developing very quickly. Modern educational technology based on information technology play a significant role in promoting the modernization of education. Modern education technology will have a significant impact on ideas, forms, process, methods, teaching and management of education. Application of modern education technology in continuing education will be a driving force to continuing education innovation. Using modern education theory and modern information technology in design, development, utilization, evaluation and management of the teaching process and then teaching resources will help to achieve the efficient development of continuing education.

[Key Words] *Modern education technology, Continuing education, Innovation*

In the era of knowledge economy, people pay more and more focus on life-long education with the fast updating speed of knowledge and continuing emerging of new technologies. As one principal means of life-long study, continuing education is becoming an important indicator of country's technological development and social progress. Along with the rapid development of modern educational technology, continuing education innovates constantly and gains tremendous progress on educational concept, process, forms, methods and management. There is a close relation between the application and development of modern educational technology in continuing education.

As Prof. Nan Guonong pointed out, modern technology is the theory and practice of using of education theory and modern information technology, through the design, development, utilization, evaluation and management of the teaching process and teaching resources, to achieve optimal teaching effect. The emphases of this paper are on the modern educational technology's influence on continuing education and its innovation.

The effect to continuing education of modern education technology

At present, the modern educational technology applied in continuing education includes

analog and digital video and audio technology, satellite radio and television technology, computer multimedia technology, artificial intelligence technology, the Internet and communication technology, virtual reality simulation technology and so on. Continuously application of these technologies process have had a profound impact on the idea, forms, methods, processes, management, and other areas of continuing education.

1. Modern educational technology changed people's traditional continuing education idea

Firstly, modern educational technology made open educational concept become a reality. Through Radio and Television University, distance education, internet training, and other open education, a large number of eager learners can easily get learning opportunities and learn more to change their career.

On the second hand, modern educational technology changed the single teachers and student's relationship in the past, into relationships of teachers and students, students and teaching resources, students and students. The change of education elements became a positive contributing factor to the development of education itself.

Thirdly, modern educational technology made personalized learning one of the characteristics of modern continuing education. With widely utilization of modern educational technology, personalized learning gain conditions for rapid development. Educational mode customized for each learner met the needs of personalized learning, and improved the quality of education greatly.

Fourthly, modern educational technology expanded the connotation of life-long education. Continuous learning and anytime, anywhere learning became landmark signs of an efficient learning community.

Fifthly, modern educational technology improved the efficiency and effectiveness of teaching drastically. Widely application of modern educational technology increased the number of participants dramatically and promoted the reform of education system of China. At the same time, the teaching efficiency got fundamental changes. The social and economic benefits of continuing education have been greatly developed.

2. The use of modern education techniques made the teaching methods of continuing education becoming diversification and beyond time and space

Modern society has special requirements of life-long learning. Employees need further education without leaving their post, technical staff working in special hours need learning in special time, farmers in remote regions need suitable cultivation technology. Because of different conditions, there are different needs for the form of continuing education.

Modern educational technology changed the single teaching form to a variety of teaching methods. Kinds of real-time or non-real-time distance learning methods solve the difficulties such as learning without leaving post. Various forms of mobile storage of courses, delivered to the same hands of learners, help to match the scattered learning needs of learners.

3. Modern education techniques provided more resource to diversification of educational method

In order to cultivate students' innovation and learning effects, a variety of teaching methods should be applied to inspire and guide students involved in learning process. With the help of modern educational technology, the traditional lecture-style and across-the-board teaching method have been changed to heuristic and individualized teaching methods, and the closed classroom is opening now.

4. Modern education techniques helped the process of liberalization of continuing education

In the process of continuing education, trainees learn the up to date courses actively. Modern technology produces a revolutionary impact on learning habits and process. "Mobile Learning" concept will not only deepen the understanding of life-long education, but also make the teaching process jumped out of the shackles of traditional classroom education. Free learning makes the learners face the challenges of the knowledge-based economy more confident.

5. Modern education techniques regulated management of continuing education

Modern office networks and information systems improve the library of teachers, students, teaching materials, student's status of continuing education. Large-scale education needs integrated modern management. Only with canonical management, continuing education can gain more and more efficient and rapid growth.

To use modern education techniques to continue continuing education innovation

China's continuing education has achieved many breakthroughs in past years. There is also some disharmony need to be improved. Through the promotion of modern technology, continuing education could be improved in educational concept, management, content, teaching methods, resources, and other aspects.

1. Concept innovation

Tracking the development of modern educational technology, especially new ideas and new technologies, is very important to continuing education. In order to realize the popularization of continuing education, modern educational technology must be widely applied to serve all learners.

Strengthening cooperation in educational technology and attracting extensive social resources to continuing education will help to build an effective, first-class continuing education network.

Internet-based modern distance education makes it possible for education globalization. In China, the internationalization of education compared to other more can be one step ahead. In order to meet cross-border exchange demand of educational resources, it is important to make full use of modern educational technology advantages, introduce foreign educational resources

and export domestic resources.

2. Management innovation

It can bring the following benefits to apply modern educational technology in continuing education management.

Flexible and open management policies make it free to learn for people with different backgrounds and different learning requirements. Applying different forms of enrollment would attract more and more learners.

Applying information technology management methods to build teaching quality control system would help to strengthen general higher education system and improve the quality of continuing education.

The continuing education marketing model must be innovated. A complete sale system is built up to analyze the education market correctly. The application of modern educational technology would make the marketing strategy and sales advertisement more media diversification and effectiveness. Particularly the emotional or humanistic sales mode, such as the learners' membership club based on the Internet, plays a prominent role for the continuing education brand.

3. Content innovation

Content innovation is the core of continuing education's sustainable development. The content of continuing education must meet the all-round needs of individuals.

Generally continuing education focuses on the learning of new theories, new knowledge, new technology, new methods and new skills. Meanwhile, it pays attention to improving the quality of humanities and potential creativity. At present, China's continuing education still focuses on teaching knowledge. There is a significant gap in quality and innovation education. In order to include production skills and quality developing training in continuing education, modern technology such as videoconference, should be used to connect separated teachers, learners and the production teaching scene into one whole class.

Individualized learning is a global trend. A modularized and personalized continuing educational system should be built up through network and data storage technology to meet the needs of individualized learning.

4. Method innovation

The need for continuing education is expanding now. The government doesn't have enough educational resource to feed this. It is an important issue to apply modern information technology to provide more teaching resource and serve more people.

New training technique should be developed. For example, live broadcasting of training in production site via Internet can benefit hundreds enterprises.

Teaching methods innovation has great effect on the continuing education. It influences not only the teaching activity, but also the trainees' sense of innovation.

5. Resource innovation

Resource innovation can be carried out in designing, developing, utilizing, evaluating and managing teaching resources. Teacher is the core of teaching resources. There are three kinds of teachers in continuing education. One is a professor from colleges with systematic theory and teaching methods. The second is renowned scholars or successful people that have rich experience in social practice and unique view of problems. The other is domestic or foreign officials and experts. How to integrate their respective advantages in developing new courses with modern educational technology is an important direction in the study of continuing education.

The educational resources innovation needs to proceed from the actual situation in China. The sharing of education resource is important when it is short. Supporting good courses and sharing excellent teaching resource should be focused on. Modern communication technology such as Internet and satellite can help to promote inter-school or inter-organization cooperation of educational resource.

To sum up

China is experiencing high-speed development now. There are still many things need to be done in continuing education. Till now, continuing education still looks like a copy of the education in school with the same teachers, teaching methods and teaching content. It is eager to find a new way for continuing education. Studying theories and introducing more educational technology can help to achieve this goal.

Curriculum Vitae

Luo Long is the research assistant of Continuing Education School of Tsinghua University. He obtained a Bachelor's Degree in department of Mechanical Engineering at Tsinghua University in 1994 and a Master's Degree in Institute of Education Research at the University of Tsinghua in 1997.

Liang Zhaohui is the Deputy Director of Remote Education Technology Center, School of Continuing Education, Tsinghua University. He got two Bachelor's Degree of Thermal Engineering Department and Automation Department of Tsinghua University in 1997. He obtained his Master's Degree of Automation Engineering of Tsinghua University in 2000.

Wu Gengsheng is the professor of Educational Technology Center of Tsinghua University. His other positions include: Director of Educational Technology Center of Tsinghua University, Vice Dean of School of Continuing Education of Tsinghua University, Director of Educational Technology Institute of Tsinghua University, Director of Magazine of Modern Educational Technology, Vice Chairman of Educational Technology Association of China, Director of Professional Committee of the Engineering College and Educational Technology Association of China.

Yang Xiaoqin is the associate professor of Continuing Education School of Tsinghua University. She graduated in Department of Computer Science and Technology at the University of Tsinghua.