

Research on Strategies of Promoting the Deep Integration of Information Technology and Higher Education

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Abstract: The deep integration of information technology and higher education has always been a hot issue in the field of education. And there is a close connection and inheritance with subject teaching. At the same time, it is also a new type of teaching structure with relative independence. The deep integration of information technology and higher education is an effective way to change the traditional teaching structure and implement innovative talents training. And it is also the trend of international basic education reform at present. There expounds the importance of promoting the deep integration of information technology and higher education in this paper. From three aspects of college, teacher and student, there puts forward the strategy of promoting the deep integration of information technology and higher education, so as to promote the informatization of education.

1. Introduction

Nowadays, with the development of social information technology, digital information has gradually occupied the main position in people's study, work and communication, and it has brought more space for the improvement of human abilities. Especially in the process of the implementation of the new curriculum concept, it plays an important role in training talents with innovative ability. The integration of the information technology and the course of higher education is not only equivalent to the simple application of educational technology, but also the intersection of disciplines forms a new teaching model and a new teaching ecology, and it is a new technology, educational integration model[1]-[4]. In March 2012, the Ministry of Education of China promulgated < ten years education informatization development planning (2011-2020) >, and it clearly pointed out that the deep integration of information technology and higher education should be promoted, the training mode of innovative talents is an important task of development. After 'deep integration' is following the 'integration', there put out the deeper requirements for the integration of information technology into higher education in China. The deep integration is based on the application of technology to improve the teaching and learning environment and the way of teaching and learning, furtherly it should realize the structural change of the educational system[5][6].

2. The significance of promoting the deep integration of information technology and higher education

2.1 Changing the traditional classroom teaching mode

As is known to all, compared with the traditional classroom, the integration of information technology and higher education is more conducive to cooperative learning, inquiry learning and problem solving activities. In the traditional classroom, The teaching mode what the teacher led is impacted by new technology. Nowadays, students' learning is no longer a process of passive acceptance, but a process of autonomous learning. Information technology is based on multimedia technology and network technology as a learning tool, to provide students with a wealth of learning resources and relaxed learning environment. Students use internet technology to collect, process, communicate, explore, learn, and acquire knowledge. This kind of learning model emphasizes the student as the main body, emphasizes the students' independent participation in learning, and truly breaks through the teaching mode of 'teacher-centered, teacher-speaking, students-listening'. The teacher only creates a teaching environment for the students, guides the students to start the operation, and then collects the relevant information according to the problem, and exchanges and studies on the net, so as to find out the answer. In this process, the teacher must first own teaching through the network to get information, so as to effectively guide the students to present in the information gathering process, which requires that teachers should firstly master network technology. This teaching model is the inevitable trend of the development of education, and the adoption of this teaching model will greatly optimize the teaching environment. In the course of teaching, teachers change from the main body of teaching activities to the organizers, guiders and helpers in the whole process of teaching. Students gradually become active participants in the learning process, activities, exploration and implementers.

Therefore, the impact about the integration of information technology and higher education on the traditional classroom is mainly reflected in the following three aspects. First of all, students' ability to acquire knowledge and understand knowledge actively has been promoted. Secondly, students' autonomous learning motivation is enhanced. Finally, students' creativity is developed.

2.2 To stress the difficulties and reduce the teaching difficulty

The appropriate using of information technology to the specific image, the combination of static and dynamic characteristics, both sounds and colors, it can put knowledge from abstract to concrete, synergy to mobilize students' various senses. This can break through the content what a teacher makes it difficult to explain and what students are hard to understand, so as to effectively realize the essence, highlight key points, breakthrough difficulty, and reduce the teaching difficulty. According to the cognitive characteristics of students, the knowledge of static and dynamic use of information technology, the specific knowledge of the abstract, conducive to the creation of active participation in the learning environment, cultivate students' divergent thinking, creative problem solving. Teachers can use courseware to present the complex process of teaching materials. Let students have an intuitive understanding; it can break through the difficulties. Students easily accept content what is usually very difficult to teach. This shows great vitality.

2.3 Stimulating learning interest and innovating educational environment

Using information technology to teach, a large number of vivid rich and colorful text, charts, graphics, image, animation, sound, film, video and other features, and the formation of electronic illustrations, images presented in front of students directly, can stimulate students' interest in learning. Let the students see and listen, deepen, speed up perception and understanding. To highlight the key points, to solve the difficulties, to enlarge the knowledge capacity of the classroom and to improve the teaching efficiency, there is profound significance for enlightening thinking and training the students' innovative spirit. Students rise to rational understanding from perceptual knowledge, so that students will feel very relaxed and happy, master knowledge soon, and memory efficiency will be very high. In the classroom teaching, information technology teaching can solve many problems with new means and superb technology. It can not only provide dynamic, rich images, graphics, text, but also it can make the classroom into a game world, vivid, intuitive, image, change the boring classroom teaching.

2.4 To ensure students' personalized learning

The development of information technology provides learning opportunities for many students who are unable to attend regular school courses on time. For example, many on-the-job students are unable to attend courses on time, and they can complete their studies through online courses. Because they lack some personality or ability, some students may refuse to answer questions in class or participate in learning activities. For these students, the use of information technology to develop virtual learning community, learning software, social networking tools can meet their special needs, allow them to choose according to the needs of teachers, learning resources, learning partners, so as to achieve the purpose of completing the course study. At the same time, students can also search for subjects and knowledge of interest to study on their own. Thus it can ensure the individualization and universality of learning.

3. Strategies for promoting the deep integration of information technology and higher education

There has made certain achievements in promoting the integration of information technology and higher education exploration and application stage in China, the construction of hardware and software resources is increasingly perfect, various teaching platform, network course gain popularity, the integration of information technology and higher education concept has been deeply rooted. However, there are still many problems in the application of information technology teaching. For example, the development and construction of digital resources is insufficient, the teaching effect is different, and teachers' information technology literacy needs to be improved. These are all obstacles in the process of promoting the deep integration of information technology and higher education in China, and it is also a problem what needs to be solved urgently all over the world. In view of the above problems, there puts forward the strategy of promoting the deep integration of information technology and higher education from three aspects of college, teacher and student in the paper .

3.1 College aspect

First of all, the college should increase the construction of the information technology spending, guarantee the infrastructure and material resources, equip with computers and peripherals enough, provide high quality educational software for teachers and students, ensure the running speed of the network system. Secondly, the college should guarantee the open sharing of educational resources. The opening and sharing of educational resources is an important strategy to promote the deep integration of information technology and higher education. Thirdly, the college needs to organize professionals to maintain and provide technical support for teachers. Finally, the college carries out teaching training, skills training, information technology application training and pre-service training for teachers.

3.2 Teacher aspect

First of all, teachers need to take the initiative to integrate information technology into teaching, and to cultivate the awareness of using information technology to optimize teaching. Secondly, teachers should use information technology in daily teaching to enhance the confidence of using information technology, so as to promote the deep integration of information technology and higher education. Finally, teachers should pay attention to the knowledge of information technology, study and practice of skills, and integrate information technology into their daily teaching.

3. Student aspect

First of all, students should be good at using information technology to find interesting content, improve the enthusiasm and initiative of learning, cultivate creative ability, and actively develop autonomous learning. Secondly, students should use information technology to learn anytime, anywhere. Thirdly, on the basis of network resources, students can choose the network resources to establish contact with the existing cognition. Through communication and evaluation, they can obtain immediate and dynamic feedback through the network, and construct the shared knowledge. Finally, students should actively participate in the challenging activities in classroom teaching, and enhance their own information literacy in the process. At the same time, students should develop creativity and imagination. The information technology should be fully integrated into daily learning.

4. Conclusion

Information technology is an important indicator what measures the extent of a country's development. Education is recognized as an important tool for influencing the country's development. Therefore, the integration of information technology and higher education is imperative. Only educational services, colleges, teachers and students make many efforts to change the status and function of information technology in higher education, so as to achieve the goal of the deep integration of information technology and higher education.

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