

## **The Intelligent Education Environment Promotes the Teaching Reform of Undergraduate Computer Basic Courses**

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**Abstract:** This paper analyzes the current situation of undergraduate computer basic course teaching and the strategies for the reform of undergraduate computer basic course teaching in the intelligent education environment from four aspects of constructing the cloud computing computer basic teaching platform and realizing the sharing of educational resources, which is a kind of promotion for the intelligent development of computer basic course education. These four aspects are the innovative design of teaching mode, innovation of the content of basic computer courses, reinforcement of the practice teaching, and promotion of the student's computer application ability.

In the context of smart education, the means and contents of education are more diversified, new ideas of education are constantly emerging, and relevant changes promote the deepening development of education reform. The intelligent education environment provides the basis for integrating all kinds of educational resources, building an effective information sharing platform and realizing resource sharing. The undergraduate computer basic course education should seize the opportunity, actively realize the upgrading and development of educational informatization, comprehensively create intelligent education and promote the continuous improvement of educational quality.

### **1. Current situation of undergraduate computer basic course teaching**

#### **1.1 There are great differences in students' computer foundation**

With the continuous development of information technology, China's computer education is also deepening the development. Some developed areas of computer education hardware construction is relatively perfect, junior high school and even elementary school students are able to improve the regularization of the computer in the computer room of study, students can learn some basic computer knowledge and be able to grasp some regular operations, thus, these areas of the students' computer literacy is higher. However, in some backward areas, the environment of computer hardware construction is poor, and some students have no access to computers even in high school and have never learned relevant knowledge. In this way, there is a big difference in the computer foundation of students, which has a great negative impact on the undergraduate computer basic course teaching.

#### **1.2 The content of computer education is highly theoretical**

Traditional computer education is based on theoretical narration, and the practical teaching hours arranged by teachers are few. This kind of computer education with strong theory is not conducive to the improvement of students' computer operation level. In the process of teaching, many teachers just teach technology, operation, lecture content and the teaching material text content even with the aid of information technology. However, the rendering of knowledge skills on the basis of digital education, which let students be lack of effective perception of related content, and the learning effect is not ideal. In order to pass the exam, students can only memorize some knowledge while the cultivation of practical computer operation level has not been effective.

### **1.3 Unreasonable selection of teaching contents**

In the selection of computer teaching content, many teachers choose the teaching content based on their years of teaching experience. The practical operation of these contents is poor, and students are not interested in most cases. In addition, the computer network development is fast as new technology and new knowledge update quickly, while the teaching material content updates is so slow that a lot of content is lagging, computer field new knowledge and technology is not being added to the teaching material in time, it also leads to basic computer courses teaching content is relatively backward situation.

### **1.4 The teaching mode is relatively backward**

Computer foundation course is highly practical, although now the undergraduate course on the course of education is no longer the traditional form of blackboard writing, with the help of the multimedia content in the form of rendering, that are some electronic way to carry out teaching activities, teachers play a major role in classroom teaching and the cramming teaching mode is still very prominent. In class, teachers explain much and students learn passively. This mode is not conducive to the play of students' enthusiasm and initiative in computer learning, and the development of students' innovative consciousness and creative learning ability is also greatly restricted. In the context of intelligent education, it is very important to reform the education model, mobilize students' interest in computer learning, and promote students to take the initiative in learning and actively carry out exploratory learning. The intelligent education environment requires that the basic computer course education must realize the reform of education mode, so that the development of basic computer course education can be guaranteed.

### **1.5 The resultant assessment is not reasonable**

At present, many schools still adopt the result of evaluation methods for computer professional appraisal, evaluating students in grades and final written examination and taking writing as the assessment which is unreasonable for it is not in accordance with the characteristics of computer, and no comprehensive response to students' actual operation level. And this restricts the development of students' computer operation level.

## **2. Strategies for the teaching reform of undergraduate computer basic courses in the context of intelligent education**

### **2.1 Do a good job in the innovative design of teaching mode**

In the context of intelligent education, the innovation and design of teaching mode must be done to promote the teaching reform of undergraduate computer basic courses. Teachers should be able to design the teaching mode creatively based on the characteristics of the intelligent education environment and the advantages of the intelligent education environment. The design of teaching mode is mainly divided into three parts: before, during and after class. Before the class, the teacher must be able to use the intelligence education cloud platform for students to push related to computer education content video courseware learning materials, such as the choice of learning materials targeted to a certain extent should be adapted to student's learning level, which can arouse the students' interest in learning to explore. On the palm cloud classroom platform, the teacher puts forward the corresponding questions based on the learning materials, and triggers the students to think and explore the questions. In the course, students can use wisdom education cloud platform cooperative inquiry-based learning independently, this process is mainly play to students' autonomous learning, teachers should consider the involvement of students on the platform, and the situation of their discussion, opinion, analyze the students' learning status to guide students' learning attitude and learning habits, finally do a good job of management to guide students to study. In the evaluation process, teachers can carry out teaching network evaluation activities with the help of cloud technology and big data technology of the intelligent education cloud platform, which is more objective and more in line with the reality of students. The application of this platform can

effectively improve the pertinence of teaching work and the efficiency of teaching management. After class, teachers will examine and approve students' homework. Unqualified homework can be timely feedback to students through the cloud platform, and students' mistakes can be guided on the platform, so that students can further improve their homework until the platform is qualified. Through the means of cloud platform teachers can not only educate and guide students without time and space restrictions, but also roll call and manage students through the handheld cloud classroom so that resolve students' questions, provide them guidance for error correction, and help them consolidate relevant knowledge and expand knowledge.

## **2.2 Innovate the educational content of basic computer courses**

Innovative course content is an important measure to promote the development of undergraduate computer basic course education under the intelligent education environment. To innovate the course content, it is necessary to have an effective understanding of the development of the computer industry based on the actual teaching situation and the application ability demand of students' basic computer knowledge, so as to integrate related content into innovation. In order to meet the needs of computer learning of different students, it is necessary to set up hierarchical courses and modular teaching contents to meet the needs of independent learning of students with different abilities. In addition, the course content of professional computer application courses should be innovatively designed based on computer application, and relevant course resources should be integrated by means of cloud platform, so as to improve the applicability and practicality of computer course education. What's more, base on the needs of student professional development, appropriate choice and student professional needs relative to the course content, it's better to continue to enhance students learning computer enthusiasm. In terms of curriculum content innovation, we should be able to contact the needs of the development of the computer industry, timely introduce some cutting-edge knowledge and skills into the teaching design, and constantly improve the computer course content, so as to effectively improve the quality of basic computer course teaching.

## **2.3 Strengthen practical teaching and improve students' computer application ability**

Practice is an important way to realize the development of computer education. It is an important measure to enhance the application ability of students' computer knowledge by strengthening the practical teaching link and rationalizing the configuration of computer theoretical knowledge and practical teaching content. Curriculum developers should be able to establish an independent practical curriculum system corresponding to the theoretical knowledge of basic computer courses based on the characteristics of undergraduate computer basic course teaching. Guarantee the practicability and operability of practical teaching content. As a teacher, he or she should constantly improve his or her practical quality, constantly enrich his or her knowledge of computer practical operation and practical teaching guidance, which is the guarantee for the successful implementation of computer practical teaching. Educators should actively guide students to participate in the practice of computer operation, so that students can realize the importance of computer practice with the help of cloud platform to provide students with a new way to participate in the practice. Teachers to the professional application oriented can by means of a cloud platform and with the help of the advanced teaching equipment to constantly improve and enrich the practice of rich education resources, and apply it in practical teaching of computer related resources fully, so as to effectively improve students' practice of computer literacy and ability to apply knowledge and skills.

## **2.4 Build a cloud computing basic teaching platform to realize the sharing of educational resources**

With the aid of a cloud platform, we can put related learning resources data and services in the cloud environment within the range of applications in various protocols and on the basis of a variety of computer software, so that the user can use the cloud platform to find various kinds of information resources about computer basic course whichever they need. This construction of the

intellectual education environment of the user computer foundation course knowledge skills for effective learning is a great boost. Based on the advantages of cloud computing, colleges and universities should actively construct cloud computing auxiliary teaching platform, carry out undergraduate computer basic course education and educational innovation with this platform, and actively create a new information environment for computer learning. In addition, colleges and universities also need to be able to share their own educational resources to the cloud platform. Through the sharing of resources and the integration and co-construction of educational resources among colleges and universities, the educational reform of basic computer courses can be effectively developed.

### **3. Conclusion**

In a word, in the context of intelligent education, the reform and innovation of undergraduate computer basic course teaching must be realized by means of information technology. As an educator, we should set up the concept of educational innovation, actively innovate the educational content and mode with the help of cloud platform, realize students' intelligent learning, effectively cultivate students' computer literacy and lifelong learning ability, and promote students' all-round development.

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