

Original Paper

Application of Computer Science Technology in Computer Education

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Abstract

The arrival of the era of big data, making the computer in all walks of life are widely used in the teaching process is also inseparable from the application of computers, some of the traditional teaching methods have also been replaced by computer technology, computer teaching has become the mainstream of the times, and has become a very effective means of teaching as well as teaching tools. The application and popularization of computers has brought great convenience to people's daily life, and has a great effect on the improvement of teaching quality. In the process of computer popularization, it is widely used in real life. And the computer as an education and learning tools, for computer education itself has great significance. In assisting teachers in the management of teaching and practical work at the same time, but also to provide students with richer learning resources and learning efficiency, so that the teaching and learning process is more concise and easy. The arrival of the era of big data, making the computer in all walks of life are widely used in the teaching process is also inseparable from the application of computers, some of the traditional teaching methods have also been replaced by computer technology, computerized teaching has become the mainstream of the times, and has become a very effective means of teaching as well as the teaching tools of the times. The application and popularization of computers has brought great convenience to people's daily life, and has a great effect on the improvement of teaching quality. Especially in the cultivation of talents in colleges and universities, the application of computers can have a great role in promoting the cultivation of innovation ability of college students. This article briefly analyzes the application of computer science and technology in computer education, starting from computer science and technology.

Keywords

Computer science and technology, Computer education, Application

1. Introduction

With the increasing popularity of computers, they have been used more and more in practical work. And the computer as a means of teaching and research is itself an important means of teaching. It can not only bring help to the teacher's educational management and practical work, but also bring richer learning resources for students and improve their learning effect, so that their teaching and learning process becomes more concise and easy. At present, computer technology is widely used in all corners of society, which has an important impact on people's life style, learning style and behavioral habits. Computer education in colleges and universities plays an important role in improving the computer level and application ability of college students. Therefore, the application of computer technology in related teaching activities is crucial for cultivating application-oriented talents and improving teaching quality.

2. Significance of the Application of Computer Science and Technology in Computer Education

In the use of computer education, computer technology has a very broad function. Computer science and technology in the application of computer education has a very wide range of roles, for example, computers can be used as teaching aids, the use of computers in the teaching process can be completed in the teaching activities of the basic teaching and teaching management, and secondly, computers can be used as a tool for students to learn, students in the study of the use of computers can improve the efficiency of students' learning. Enhance the learning ability of students, so that students can learn conveniently in many places, even in the family can also use computers to complete the teaching tasks in school. Computers can be utilized to check whether there are any insufficient aspects in teaching activities, so computer teaching has a very important role in the basis of teaching.

3. Specific Uses of Computer Science and Technology in Computing Education

3.1 Introduction of Multiple modes of Computer Teaching

With the arrival of the information age, remote communication has brought about a very big change in people's production and life, and has now been applied in most schools, and has also achieved very good results. Computer science and technology is mainly based on network communication and computer, integrating the interactivity of the computer and the distribution characteristics of the network, so that the quality of computer education and educational effects have been maximized and strengthened. The use of multimedia technology for teaching, not only on the teaching content and teaching methods have greatly enriched the teaching effect, and through the use of multimedia technology to prepare the courseware can also save costs to a certain extent, the production of courseware can also make the content of the textbook intuitively displayed to the students to watch, but also can be downloaded at any time to facilitate the later viewing. Teachers can use computer technology to fully mobilize the classroom atmosphere through voice-activated mode, so that students are interested in independent learning. This will ensure that teachers and students can communicate

with each other in real time, without spatial limitations. Teachers also need to combine the content of the textbook, regularly hold relevant thematic activities, so that students can find relevant information through the Internet and make preparations in advance. After collecting the information, it can be exchanged in the classroom, so that students' learning motivation is fully stimulated. Moreover, the use of integrated network learning space for teaching mode, learning mode innovation, the establishment of educational resources sharing, and actively encourage teachers to regularly carry out the corresponding teaching activities, so that students can carry out independently through the network learning space, so that not only according to the student's own learning situation to develop a learning plan, but also make the students' motivation to fully mobilize, so as to develop good learning habits. The students can learn independently through the network learning space. Based on the network learning space, the use of big data analysis to collect students' daily learning situation, optimize the teaching mode, so as to improve the teaching effect and teaching quality. In general, the integration of computer science and technology in computer education not only realizes diversified teaching functions, but also makes the quality of computer teaching greatly improved, and promotes the development of China's computer education cause to a large extent.

3.2 Use in Teaching Management

Teaching activities not only include lectures, but also has teaching management, teachers not only answer students in the classroom related issues, but also pay attention to students' psychology and life. However, because of the limited teaching resources, some teachers have to teach more than one student, resulting in the neglect of education beyond the student's performance. The advantage of computer science and technology is to make the teaching management work more orderly and efficiently, which makes it easy for teachers to observe the students' situation. Teachers can create a student record for the class as a unit, which includes class performance, attendance, regular grades, homework and final grades. Through this file, teachers can record and grade students' performance at any time. Using the appropriate software, teachers can quickly and easily calculate the student's ranking and grades, and have a clear picture of the student's learning situation, if the student has abnormalities, but also be able to find and feedback in a timely manner.

3.3 The Role of Remote Communication and Network Technology in Education.

In the educational work of colleges and universities, the application of remote communication and network technology has begun to play a huge role in teaching. This kind of technology is based on modern communication computer technology and network technology, as well as multimedia technology, etc., and then combined with the interactivity of the computer and the distribution of the network, so that the remote educational information services to do more widely. In fact, this approach has attracted the attention of educators around the world and has been fully reflected in the educational process. Both in our country and around the world, modern distance education has been included in the focus of research by educators and scientists. In traditional teaching, interactivity is indispensable, and most of what was practiced at that time was a dialogue between teachers and students, i.e., direct

communication with language as a carrier. If the use of multimedia teaching, students can not only see in the process of learning the teaching of image materials, and sound, text, etc. can be involved in the teaching process, which in the process of students to master knowledge injected into the interesting, vivid, often make the teaching work become more intuitive image.

3.4 Examples

The use of functions to find the number of subjects pass, pass rate, the number of excellent, excellent rate. Seek the number of passes, we only need to enter in the cell "`= COUNTIF (C: C43, ">= 60")`" (input the contents of the formula are in the state of the half-corners, and then continue to use the drag pegs for dragging to find out the number of passes in other sections) (the following are the same).

Pass rate, simply enter "`= COUNTIF (C:C43, ">=60") / COUNT (C2: C43)`" in the cell. ("C2: C43" on behalf of C2 to C43 of all consecutive cells, ">= 60" is the condition, is greater than or equal to the meaning of 60. COUNTIF function is to meet the conditions of the number of cells, COUNT function is to seek a non-empty (The number of cells) in this section of the teaching, I also used the guided teaching method, when the teacher gave students the appropriate case, the number of excellent and excellent rate of the task was given to the students, the students through the teacher has explained the knowledge, thinking, discussion, practice, consolidate the knowledge learned in this section. In this way, not only give students the space for independent thinking, but also achieve the purpose of more practice.

This case not only contains the above description of this knowledge, it almost includes "common office software" in EXCEL all the basics. The use of this case, we can formatting, sorting, screening, classification summary, validity settings and production of charts and other exercises.

3.5 Convenient for Students' Daily Learning

Because computers can be used anytime and anywhere, it is not subject to the constraints of time and space, and computers have the characteristics of fast access and fast uploading, maximizing the convenience of students' daily learning, students use the computer search function of the Internet, you can quickly and accurately find the information you want, in addition, the Internet is very rich in learning resources, which can help to inspire students to independently think about the problem, and improve the students' ability to think about the problem and solve it. Students thinking and problem-solving ability, cultivate the ability of students to learn three things at once, and students will also be easier to learn, the Internet learning resources for students is very attractive, students are very interested in learning, driven by this interest, so that the students learn independently and become more and more fond of learning, the Internet's vast learning resources, so that the students' knowledge has become more enriched, in the actual classroom, the students can find information they want quickly and accurately. The vast learning resources on the Internet make students' knowledge become richer, and in the actual classroom teaching process, there are more rich topics in the process of interaction and communication between teachers and students, which creates a relaxing and pleasant classroom learning atmosphere, so that students can learn and master the knowledge points in the discussion, and

experience the fun of learning knowledge points in the talk; in addition, because each student's receptive ability and learning progress is different, the traditional teaching mode is usually teachers to adopt a In addition, because each student has the same receptive ability and learning progress, the traditional teaching mode is usually adopted by the teacher, and the whole class listens to the teacher's explanation under the podium. Making full use of the Internet, which is not subject to the constraints of time and space, we can flexibly change the classroom teaching practice and send the video related to the classroom knowledge points to each student, so that the students can comprehensively master the teaching content of the classroom and can also help students deepen their impressions and memories of the knowledge points by sending the students some relevant extracurricular video materials. Knowledge points of the impression and memory, so that teachers and students can not be bound by the classroom 45-minute course time constraints, teachers originally explain the textbook knowledge points of the time is not very sufficient, more time to think of students to explain the extracurricular knowledge points, and now this mode of teaching a very good solution to these problems.

4. Prospects for the Application of Computer Science and Technology in the Work of Education

4.1 Reasonable Construction of Teaching Platform

In the regular classroom, teachers are relying on face-to-face manual assignments and grading, this practice not only increases the burden of teachers and reduces their educational effect, but also difficult to do effective monitoring and process management of their learning and their performance. Therefore, colleges and universities need to use computer technology to build a reasonable teaching platform according to the reality of the teaching situation and the learning situation of the students, and to supplement and update the teaching content on it in time, and gradually increase its educational efforts, so as to adapt to the reality of the needs of the teaching objectives at all stages. In daily teaching, first of all, we should effectively manage students' assignments, teachers can use the computer teaching platform to upload assignments, and students can also use this platform to submit assignments and send questions and problems to the teacher in completing assignments. Such an effective method of assigning and submitting assignments can greatly reduce the process of intermediary operation and lower the workload of teachers. In addition, teachers can also use this computer platform to monitor their learning status, during the monitoring, students can answer and upload their test questions on this platform, after the test, they will send the test questions to the teachers, who will correct them on this platform, which can make up for the lack of supervision by the regular teachers, and can better save the education cost.

4.2 Enrichment of Teaching Resources

Teachers can use computer science and technology, constantly enrich the educational teaching resources, improve the use of computer technology, better adapt to the current actual teaching. First of all, teachers can guide students to use the Internet, in the event of a problem, you can find the relevant video online to answer the question, through the continuous enrichment of educational resources, to

improve the activity of the classroom and intuitive degree, to help students better understand. Secondly, teachers are able to utilize computer technology to constantly enrich and enrich their courses, save their time, and in a sense establish a variety of learning modes so that computers can become the most important means of learning, thus being able to effectively reduce their teaching costs.

4.3 Networking

Computers have become very popular, and have had a certain impact on home appliances, gradually moving towards intelligence. Computer with the help of the network to control home appliances, fully automated, to create a good environment. Air conditioning is a common home appliance, improving the indoor environment through temperature regulation. With intelligent technology support, air conditioners will sense the external environment and operate autonomously by integrating and processing relevant information. For example, in winter, when the temperature is low, the air conditioning system will adjust to the appropriate temperature to meet people's needs. In order to save indoor space, home appliances have hidden functions, which are accomplished through computerized operation. Networking has changed the way of human work in the past, basically realizing automation, making adjustments according to the changing needs, with strong applicability. Modern people have been inseparable from the network, at any time to browse information, find information, watch movies, etc., so networking is an important direction for future development.

4.4 Intelligent

It refers to the support of the network, big data, Internet of Things and artificial intelligence technology, which can meet various human needs. Smartphone is the best representative, taking human needs into account when designing, innovating the technical concepts, having humanized features and being more convenient to use. When taking pictures with the phone, the camera automatically recognizes the face and takes a clear image. Fingerprint unlocking improves the security level of the phone, and only the person can unlock it to protect the information. When the power is low, the phone will automatically prompt to charge, these are the embodiment of intelligence.

5. Conclusion

In summary, in the continuous development of computer science and technology, in order to make the traditional way of education can be better adapted to the needs of society and its own development, education and teaching methods to continue to innovate and reform, in the support of computer technology, many of the teaching methods will become very rich, at the same time, the use of computer technology in the management of teaching and learning can make computer technology and traditional teaching work At the same time, the use of computer technology in teaching management can make computer technology and traditional teaching work, is the traditional teaching work and computer science and technology to become more closely, which not only helps to improve the quality of teaching, but also can control the teaching content. At present, the main thing is that education for the future, but the most important task in the educators is the existing teaching technology to innovation

and reform, so that computer science application technology in education can flourish. In the process of computer education, teachers should make the correct use of computer technology, expand the access to teaching information, create a diversified teaching mode, build a perfect teaching management system and research system, strengthen the management of technology, computer information and other aspects of the link to the effective integration, so as to lay a solid foundation for its subsequent development.

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