Research on the Present Situation and Current Situation of Computer Basic Education in Colleges and Universities

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Abstract: In the information society, mastering and applying information technology, especially mastering and applying computer technology, is the basic cultural foundation that people must possess, and also an essential tool in life and work. This paper takes computer teaching in colleges as the research object, and studies the current situation and development countermeasures of computer basic education in colleges and universities. First of all, a brief overview of the background of computer basic education in colleges and universities in China is given. Secondly, from the position, content and object of computer education, this paper comprehensively discusses and studies the current situation of computer basic education in colleges and universities in China. Finally, the development countermeasures of computer basic education in China's colleges and universities are introduced in detail. The basic computer education in colleges and universities should establish an evaluation system that can promote the continuous progress of teachers and students. It should not only pay attention to the effect of learning, but also take into account the process of learning.

1. Introduction

At present, the background of computer basic education in Colleges and universities has changed obviously with the beginning of the 21st century. These changes are mainly embodied in the following aspects: first, the society presents the characteristics of informatization, and the course and knowledge background of the increasing speed of the popularization of information technology in all walks of life [1]. The popularization and effectiveness of education in a country will largely determine its development speed and sustainable development. The world has entered the information age, and computer science and technology are rapidly advancing at the speed of a thousand miles a day [2]. After years of hard work, the computer basic education in colleges and universities has also achieved great development and achieved gratifying results. The computer basic education of ethnic colleges and universities has also made due contributions to the development of ethnic areas [3]. As a professional and job requirement, computers have become the basic skills of job hunting as foreign languages. Without mastering computer technology today, it is difficult to control advanced science and technology, and it will lose its advantage in fierce competition. Computer knowledge has become an indispensable part of the knowledge structure of contemporary intellectuals and has become an important part of human culture [4-5].

Computer basic education in colleges and universities is a non-computer major computer education in colleges and universities. Nowadays, the demands of computer technology in various jobs are getting higher and higher. As with the English level, the computer level has become one of the standards for measuring the ability of college students [6]. Therefore, the improvement of the basic level of computer education is conducive to improving the quality of college students' training, expanding their professional level, and improving their social adaptability, making them a compound talent that can master both their own professional knowledge and computer skills [7]. On the basis of consulting and possessing information, this paper, through sorting out and refining, explores the current situation, existing problems and measures and Countermeasures for further improving computer basic education in colleges. All over the country, computer training for civil servants is being carried out, and even in some areas, the examination results of civil servants' computer training courses are linked with "selecting the best first". The computer training market

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has been booming. It has a strong guiding significance for promoting the teaching reform of basic computer courses in accordance with the current situation of basic computer education and taking computational thinking as the starting point.

2. Materials and Methods

There are four kinds of correlations between the courses that teachers have taught in the past and the specific courses: those that have taught this particular course before, those that have taught very similar courses to this particular course before, those that have taught similar courses to this particular course before, those that have not taught this course and similar courses. Time factor should also be taken into account here, because teachers may undergo transition in their career, so the recent relevance weight should be greater. Because most computer graduates are unwilling to engage in education, this is the root cause [10]. At that time, due to the lack of teachers, the curriculum must be opened, so some teachers only need to understand some computer operations and are on the computer basic course. At present, the situation of the teaching staff has been greatly improved and improved. Due to the rapid development of information technology, the computer technology course is faster than the other courses, and the technology is eliminated quickly. China's computer technology started late and has a weak foundation. Although it has made great progress in recent years, its development is generally lagging behind.

In the past few years, special funds have been allocated to update computer equipment, and the multimedia teaching environment has been expanded to strengthen the network construction. The teaching conditions of computer basic education have been significantly improved. As shown in Table 1 and Figure 1.

Table 1 Computer basic teaching conditions

Teaching conditions	Number of computer equipment	Proportion (%)
Preferably	124	75.36
Commonly	85	60.14

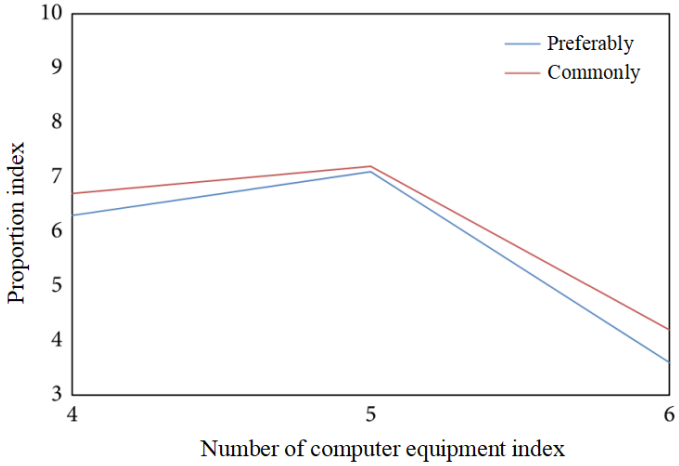

Fig.1. Computer basic teaching conditions

Faced with the rapid development of computer science, the content of basic computer textbooks selected by colleges and universities generally lags behind the development of computer application technology. For non-computer majors, the main purpose of learning basic computer courses is to learn to use the latest computer technology to serve their major, and to achieve immediate results. The teaching content of computer foundation is set in the textbooks, and the process of compiling these textbooks is different from the training course published for commercial purposes, which requires a long review cycle. Therefore, a large part of the students currently surfing the Internet are lying, using swear words, reading bad information, distributing viruses, and even having various kinds of information crimes among these students. These are worrying phenomena. This is also due

to the hidden nature of information exchange. Interest is a source of positive and enthusiastic enthusiasm for a teacher. Therefore, in the comprehensive decision-making model, each teacher should be infused with a course of relative interest and ranked according to the size of interest.

At present, the first level of computer public basic courses begins from the beginning, and the content is the basic knowledge and basic operations of the computer. Some middle schools and elementary schools also offer computer courses. Primary schools, middle schools, and universities all start from scratch and learn word processing. This phenomenon should be given enough attention by the relevant leadership departments. Without a high-level and high-quality faculty, it is impossible to have good teaching quality. The current tasks of teachers engaged in computer basic education are heavy. Faced with the triple pressures of expanding enrollment, renewing and expanding curriculum content and using modern teaching methods, the renewal of teachers' knowledge has become an ineviTable problem for every teacher, and the construction of teachers' team needs to be strengthened constantly. In addition to the traditional computer knowledge, there are many new disciplines and related disciplines, which enrich the traditional knowledge of computer technology. Some colleges and universities lack systematic arrangement of computer courses, only pay attention to the study of theoretical knowledge, ignoring the combination of theory and practice.

3. Result Analysis and Discussion

At present, there is a widespread phenomenon of poor practical ability among University graduates. Many students have focused their study on obtaining certificates, hoping to prove their abilities through various certificates. Most non-computer majors in Colleges and universities have to take the corresponding computer grade examination after they have completed the basic computer courses. Because the purpose of compiling textbooks is not simply to deal with the computer grade examination, there is a certain gap between the national designated textbooks and the computer grade examination question bank. Teaching materials are the foundation of computer education. With good teaching materials, we can have good teaching quality. In the process of compiling the textbooks, it is necessary to emphasize practical ability, improve the application level, and avoid empty theoretical descriptions. It is necessary to compile teaching materials according to the different focuses of each major, and select the required teaching materials according to the characteristics of each major. Non-computer majors are very different from computer majors in terms of training objectives, curriculum system, school schedule, and student foundation. Therefore, in teaching methods, special emphasis should be placed on object-oriented, targeted, and have their own ideas in the preparation of textbooks. To create a new path.

In recent years, in the publication of textbooks, the situation of”a hundred flowers blossoming and new innovations“has been presented. Many teachers engaged in computer-based teaching actively participated in the preparation of various related textbooks, which reflected the characteristics of the new era. Some good textbooks with good quality and wide benefits have emerged. As shown in Figure 2 below.

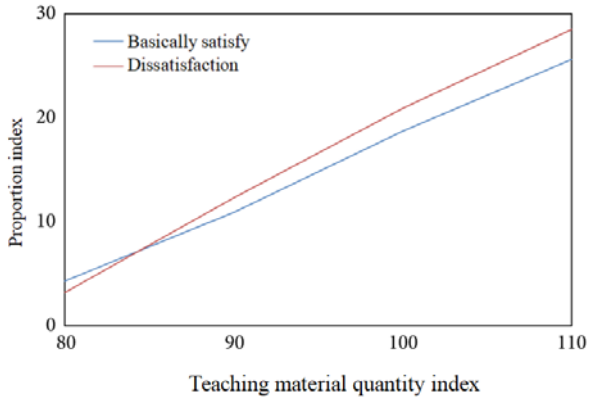

Fig.2. The construction of university computer basic textbooks

Computer education has been popularized since the beginning of elementary school and has been strengthened in the middle school era. Further improve the starting point of computer basic education, so that the basic knowledge of computer technology can be consolidated in the primary and secondary schools, so that the computer courses in college can be closely integrated with the professional courses, or the computer equalization of the students can be controlled. The emergence of stratification. For courses focusing on principles, the textbooks for computer science should not be copied or condensed. Instead, the curriculum content and system should be redesigned according to the needs, and students should be carefully studied. What should be included and what should not be included? Never seek perfection by greed, and pursue the systematicness and integrity of the subject unilaterally. Computer specialty should pay attention to the technical problems of computer network and the underlying structure, while information security specialty should pay attention to the security problems under network communication. Therefore, the three majors should choose different teachers for computer network in order to achieve the goal of individualized and diversified teaching.

Students in the school have a scientific approach to computational thinking, which is conducive to improving the breadth and depth of the curriculum. Taking computational thinking as the starting point, computer basic education should also cultivate students' understanding of the value of big data. Through the processing of big data, it can acquire a lot of knowledge to guide the operation of enterprises and improve efficiency. These qualities are compared with the teacher's past teaching curriculum and research field, and the decision makers formulate their respective weights to calculate the teaching relevance score. At the same time, teachers' recommendation and self-recommendation were added. Each teacher can choose whether to recommend himself or not, and recommend one or two suiTable teachers. Considering the need of further development of knowledge for college students, we should not only learn operational skills in universities. Currently, computer basic courses in Colleges and universities include two categories: one is the course focusing on principles, the other is the course focusing on application.

4. Conclusions

At present, in view of the common problems in computer basic education in Colleges and universities, we should improve the starting point of education, adhere to application-oriented, and strengthen the training of ability and scientific computing thinking. In accordance with the development of information technology, social needs, student development and professional requirements, we should reform the curriculum system, innovate teaching models and train qualified application talents. In order to make rational use of the limited resources of university teachers and improve the quality and effect of teaching, this paper proposes a comprehensive decision-making model for teachers' curriculum selection. The model comprehensively considers the teacher's teaching performance, teaching relevance and teaching interest, and creates a good educational environment for the individualized development of students. On the basis of analyzing the factors influencing the development of computer basic education in colleges and universities, combined with the relevant computer basic teaching experience, this paper explores the task-driven teaching mode suiTable for computer basic teaching, puts forward the viewpoint of establishing a development evaluation system, and puts forward the construction of teachers. The method of establishing a computer-based teaching team to improve the teaching level.

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