Computer Course Teaching Reform based on Education Informatization Challenges

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Abstract. With the development of computer, information technology has penetrated into every field of life. Computer basic courses are common opened in colleges and universities, which has quietly changed the way of teacher's teaching and student's study. In information age, mass learning and personality education have become a general consensus. Under the challenge of education informatization, computer courses teaching will gradually change to keep up with The Times development. Information age provides opportunities for education reform which is beneficial to promote computer teaching and improve the teaching effect.

INTRODUCTION

Computer basic course is a compulsory course for every college student. With the development of computer, it has got into every corner of life, so its importance is obvious. Information instant penetration makes computer course face enormous challenges. At present there still are many problems in computer courses teaching in our country, leading to low students' learning interest. Computer courses teaching is not very effective and teaching methods and ideas are not consistent with the Time, which is not conducive to cultivate high-quality computer talents. Therefore computer curriculum reform must be carried on so as to change the current situation of computer course teaching in our country.

THE PRESENT SITUATION OF COMPUTER TEACHING

A. Old course content

Computer development is in high speed. The students fostering mission of colleges and universities is to lay foundation for the later work, so college courses should be updated with the development of computer. But the common problem of colleges and universities in our country at present is that computer course content is too old. A copy of the materials is used for many years and the update rate of teaching materials couldn't keep up with that of computer. Although many schools change the old teaching materials for Fundamentals of Computer, the content has no too big change. It is a kind of typical behavior, so students’ learning contents can't keep up with the development of The Times and the demand of the society.

B. Backward teaching method

With the development of economy, colleges and universities are generally equipped with multimedia classrooms. Teachers in colleges and universities are using teaching course-ware. Compared to previous traditional teaching, this, to a great extent, improves students’ interest and has also obtained good teaching effect. But there are still a lot of problems. Teachers are using multimedia teaching, but the situation is still teachers’ talk all the time and students passively listen. Student's main body status has not been respected, and there is little interaction between teachers and students. Teachers’ cramming education transforms into a new environment full screen cramming, which cannot cultivate students’ ability.

C. Value theory and neglect practice

Computer course is different from other academic content. Its practical operation is very strong, so computer course teaching is focused on the practice through theoretical study. Colleges and
universities are poisoned by exam-oriented education. Computer course is taken as general literacy class, which gives priority to the teacher's theory teaching, and practice teaching is put aside. Computer courses teaching classroom is always in multimedia classroom. The teacher operates and students watch the operation, and many students still do not know how to operate after the class. The class is not impressive. A lot of students who grasp textbook knowledge better have passed national examination, but in practical application they are still scrambling. Poor practical operation ability of students is not profitable for the work after graduation, which hinders employment growth.

**THE NECESSITY OF COMPUTER COURSE TEACHING REFORM**

**A. The needs of social development**

With society progress and economy development, the required number of personnel is bigger and bigger. Not only the number is larger, but there are more and more high quality requirements. Especially in information age today, the popularity of computer and the informatization level of the whole society are gradually improving. Computer network technology is in all walks of life. Each enterprise develops from traditional paper and pen to the phenomenon of computer paperless office gradually, which improves the efficiency of the office and make the enterprise office work gradually develop in the direction of informatization. Enterprise itself is developing with the development of The Times, so the demand for talent will constantly change. In today's information age, computer literacy is a basic work of employment quality. Computer becomes normal standards and basis in today's employment. Employment personnel should master the use of computer software, and then they can really survive and develop in the fierce competition of enterprise. This is the basic condition of their employment. When enterprises recruit talents in informatization environment, they almost all emphasize the computer level of applicants. This is the trend, so due to the needs of social enterprises development, schools also must carry on the reform of computer courses to adapt to the demand of social enterprise and the market. Truly connect with social practice to cultivate high-quality talents for social needs.

**B. The needs of students' development**

In recent years, colleges and universities began to implement the enrollment expansion with positive response to the call of national policy, and more and more students enter colleges and universities for higher education. The number of graduates is increasing year by year and talent market competition is increasingly fierce. The competition among graduates is more intense. Enterprise units are limited and the number of students is far more than enterprise development needs. The number of graduate students is increasing year after year. In the face of such severe situation, students have to improve their competitiveness and improve their skills. And computer fundamentals are the consensus and basic requirements now for companies recruiting talents under information age. Students want to successfully find a job after graduation, so the most basic computer literacy has to be passed. But in current situation, computer courses teaching in higher education has shortcomings. Not only the teaching content can't keep up with the needs of the development of times, but also it is not consistent with the demand of society and enterprises. So computer course knowledge in higher education is largely useless and cannot satisfy the demand of students' future development and employment. Especially college computer teaching values theory but neglects practice philosophy hinders the improvement of students' computer skills. It is unable to ensure that students improve their computer level and ensure their basic literacy improvement in employment. It is prone to have the situation: only know theory and have bad hands-on ability difference. So in later work they can't finish the work quickly. It is not conducive to future development of the students. Therefore, computer course teaching reform under the challenge of education informatization is not only the need of social development, but also the need of students themselves development.
COMPUTER BASIC COURSE TEACHING REFORM MEASURES

A. Apply information technology to improve the teaching plan

The development of information technology not only brings great challenge to computer teaching, but at the same time brings opportunity for computer course teaching reform. The development of computer information technology can help teachers change the traditional "blackboard, teaching materials, students" classroom teaching mode, which greatly enriches teacher's teaching method, provides more convenient, dynamic tools, and makes computer course from abstraction to concrete. This can make teacher's computer teaching easier and make students more intuitive. It improves PPT, word, etc. teachers teaching way, and completely changes the monotonicity of computer classroom. It actually enriches teaching resources of computer courses, which is not only convenient for teachers teaching and improves their own teaching plan, but also is beneficial to stimulate students' interest in learning, arouses the enthusiasm of students learning and initiative, thus promotes the teaching efficiency and results of computer classroom and improves the level of students' computer knowledge.

B. Use campus network and build learning website

In the challenge of education informatization, colleges must make full use of network information technology, make full use of abundant teaching resources, and set up a network platform or study site for the students to learn. This not only can promote students' autonomous learning, also can strengthen the communication between students and teachers. Learning website's main function is to put some multimedia teaching plans teachers used in classroom, and some related electronic documents, mainly about some computer courses learning materials. Learning website enables student study anytime and anywhere and autonomously learns what they do not understand or the content they do not remember in class. This not only lighten the burden of the teachers’ secondary teaching and helps students develop the good habit of autonomous learning. It improves the students' interest in learning and strengthens students' computer knowledge. The establishment of learning website not only enriches the teaching means, saves teacher's teaching time, also provides students with their learning heaven and earth. It not only respects student's main body status, also promotes the exchanges and communication between teachers and students. Education informationization environment realizes personalized teaching, group collaborative learning, and online learning and other study way, meanwhile, it provides students with diverse learning styles.

C. Practice "classification teaching"

While college students entering school, as a result of comprehensive factors, each person's computer basis has very big difference. As a compulsory course for the freshmen, computer teaching to students of different levels should be on the basis of professional requirements. Only in this way can students be taught according to their aptitude. Improve the students' enthusiasm and promote the learning of knowledge so as to improve the teaching quality and promote students growing up together.

For newly enrolled new students, schools should conduct a test. On the basis of students’ examination, divide students into different classes according to the examination result levels, so as to reasonably teach according to students’ level. For example, for different majors, the need of computer level in learning is different, so the computer course is divided into ABC kinds. Some majors have low computer professional requirements, such as language literature major my study A computer course. And for management major, which has slightly higher demand for computer, can study B computer course. For some technology or computer majors, practice the highest level C computer courses teaching. The teaching is not only according to the requirements of professional nature, but has to be associated with the needs of society really.

D. Teaching mode which values practice

Computer course is of strong operational practice, so while attaching great importance to theoretical teaching in the classroom, and pay attention to the students' practical operating ability. Basic knowledge teaching can be placed in multimedia teaching, but practical content of teaching
should be in the computer lab. Strengthen computer assisted instruction. Only with practical operation on the computer can students' impression be deepened. Make students learn knowledge and improve the operating ability of students. In addition, on this basis, colleges have to develop some test software specifically for students learning for students in class and after class learning and assessment. This not only improves students' learning enthusiasm, but improves students' learning ability. It strengthens the basic computer knowledge of students and helps them master computer operation skills. Let the students learn in practice and it improves students themselves in practice. In order to improve the practice ability of students, the school's computer examination way also should abandon written test and value the form of machine examination to fully check the students' practical ability and the mastery of knowledge.

E. Interaction theory teaching method

Traditional classroom only pays attention to the teacher's leading role and completely ignores the students' subject status. Teachers teach and students study passively. It didn't interest students for learning. Although now the teachers teach with multimedia auxiliary, the traditional teaching and learning situation between teachers and students is not changed. The interactions between teachers and students are little. This kind of situation has a direct relationship with the teacher's education idea. They still stay in traditional education ideas. In the face of such situation, the teacher's teaching methods must be improved from cramming education mode to interactive teaching mode.

Interactive teaching is indispensable of modern teaching technology conditions and the exchange and interaction between teachers and students, thus to implement interactive teaching, two interactions must be implemented. One is language interaction, which is the communication between teachers and students; the other is teaching and multimedia interaction. To break the previous passive situation, the communication between teachers and students is necessary. Through communication the teacher can attract the students’ attention, inspire students and stimulate students' interest in learning. Let students actively participate in class and give full play to their main body role so as to make the students happy to learn and enrich the learning. The purpose of interactive teaching is to stimulate students' interest and promote students' learning, so the teacher must make full use of the existing teaching resources, fully combine multimedia and teaching. Provide students with comprehensive knowledge, broaden students' vision, and improve students' interest in learning. Interactive teaching method is beneficial to the communication between teachers and students and at the same time it is also an indispensable link to improve students' computer level.

CONCLUSION

With the development of technology, education informatization has brought great challenges to computer teaching. There are many problems in computer teaching. With the development of The Times, society and the change of students’ development requirements, computer teaching reform has become urgent. To effectively reform computer course teaching, we have to make full use of information technology, improve the teaching plan, use campus network and build learning website. Practice "classification teaching", implement practical teaching model and use interactive teaching method. Then, computer course teaching may train high quality talents for the society and enterprises.

REFERENCES

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