



Journal of Applied Sciences

ISSN 1812-5654

science
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The Study of Public Computer Teaching System in Local Universities

Jing Zhou and QuanJu Liu
Huanggang Normal University, 438000 Huanggang, Hubei, China

Abstract: The public computer basic education has become a required course for college students, however, especially the application of the basic capabilities of local college students into the school computer and understanding of the factors varies, as well as lack of local colleges and universities teaching resources, college teachers with basic teaching of the public computer to certain difficulties. In this brief from the curriculum, course characteristics, teaching methods and teaching reform to explore how to improve the local college of basic computer teaching in such circumstances.

Key words: Local universities, basis of computer engineering, teaching system, curriculum structure, reform measures, computer basic education

INTRODUCTION

"University Computer Basis " course is a computer science students to learn basic computer education in the first course, involve an area wide, effect big. The curriculum is the basic teaching of the computer foundation and key, is for the non computer major students with computer knowledge, ability and quality education, in order to make students to computer science have an overall understanding of computer hardware and software, to enable students to master some basic knowledge, as well as network, database, program design, software development, multimedia, information security and other aspects of the basic concepts and principles of content, be familiar with typical computer operating environment and work platform, with the use of commonly used software tool to deal with the daily affairs of the ability (Zhou, 2006). The curriculum should cultivate students' use of computer analysis, solving the problem of awareness and ability, improve the students' innovation consciousness and information literacy, students follow courses, as well as the future use of computer knowledge and technology to solve practical problems in their professional and lay a solid foundation.

PROBLEMS IN THE TEACHING OF COMPUTER BASIS

The current lack of effectiveness of different teaching methods: All parts of the country and accelerate the basic computer application popularization progress, deepen the basic computer application content, so that most of the students have some basic computer knowledge and

application ability. However, because of the curriculum is the public basic courses and practical requirements, another student's basic computer skills are different (Zhou and Liu, 2008), so that the teachers should first solve the problem is the students have basic computer and the computer application ability differences. The computer foundation teaching brings certain difficulty but also become a place of college basic computer course teaching must face the problem of curriculum reform, is the bottleneck; secondly, science, management, liberal arts, art classes and other students of computer applications demand also each are not identical, teaching how to discriminate. To achieve the best effect, is worth further research.

The current lack of the completeness of curriculum ideas: On Teaching of computer foundation courses on its teaching purpose, many local colleges and universities have not yet reached a consistent understanding, even in the same department different teachers for teaching content and objective understanding of significant differences. Cause a lot of professional curriculum system in time, not fully consider the computer basic courses and professional courses related content integration. Now the development of all walks of life and the development of Computer Union is very close, industry practitioners of computer application level is high, due to the professional computer knowledge level, the requirement of knowledge structure is different, so professional to set the curriculum system is very important. But the current teaching of computer basic courses and professional courses setting separation, leading students in computer basic course after the end, during the follow-up courses, there is little

opportunity to apply the computer skills, students are difficult to adapt to various social sectors to computer application capacity requirements.

The current lack of individualized teaching methods and models: From the perspective of teaching object, hand between students in basic computer and the computer application ability, there is a huge difference. Caused the difficulties of teaching in the class basis of poor students are not and can not be timely digestion and the foundation for better students feel addicted. Form two students cannot learn, learning through teaching situation; on the other hand, different majors in learning and the time to work on computer application needs are different, learning the same contents and cultivating the same ability, for the professional students is obviously not suitable. On the teaching point of view, always adopts a teacher-centered education teaching mode (Yao and Sen, 2013), so that students are always in the state of passive learning, students' learning initiative is ignored, even be depressed, directly influences the teaching effect.

The current lack of new teaching content: Some college students in school before have some basic computer operation and network application etc. College Students' level of computer application in improving and computer education is the " zero point", the traditional teaching content has been difficult to adapt to the information age society employment requirements: Another aspect of computer basis in terms of content also has simple repeat and repeat teaching problems (Zhou and Fang, 2009a), while local college computer basic education the content is still confined to the basic theory of computer, Windows, Office operation, network technology, multimedia technology and other aspects, not fully consider the characteristics of students' specialty, interest in learning and employment after the computer application ability demand. So that the students' learning interest, the teaching effect is not good, not good to cultivate students' ability of computer application.

The current lack of cultivation of comprehensive application ability method and evaluation system: Along with the computer foundation teaching compression, teachers in the teaching are often only pay attention to the examination content explanation and students to focus only on the content of examination of master. So that teaching and learning become oriented to cultivate college students' comprehensive knowledge and logical thinking. At the same time, the existing examination mechanism more emphasis on the results of evaluation and ignore the teaching process in the evaluation

process, so that students will test without the use of the knowledge to solve practical problems, thus weakening and ignore the comprehensive application of computer ability training.

The curriculum structure and characteristics: College basic computer course group combined with the Ministry of education " to further strengthen the university computer foundation educational views " in curriculum structure setting, put forward "1+X " new pattern, namely a " University Computer Basis " + number of required/ elective basic computer code type core curriculum curriculum system (Wang, 2011), the course teaching is not only to meet the simple computer operation but to cultivate students' comprehensive application of computer ability, enhances student's information accomplishment and the ability of logic thinking.

Local colleges and universities for non computer major students in the general setting for the " University Computer Basis "course+" program design basis "course which uses a" computer foundation" course for entry and then use a "program design" course and cultivating the ability of thinking and logic. According to the actual condition of local colleges and universities and talents training target (Zhou and Fang, 2009b), course name and class may be different but the course of the target group are basically the same, that is " to widen their knowledge, improve skills, fostering innovative ability".

Through many years in public computer basic teaching of computer basic course for non-computer majors in several major characteristics: One is the period decreased year by year, two is the curriculum content is more, three is basic computer knowledge updates quickly, four is the course's practical, five is especially college students' overall quality. Although the local colleges through some measures such as: To reform the teaching contents, so as to adapt to the computer application; the reform of teaching methods, to improve teaching efficiency; reform teaching method, strengthen the training of students' ability, cultivate the creativity of students, improve students' basic quality; reform of course system, provide students with more classes and learning space. But as a result of public computer course itself characteristic and local college students computer knowledge gain ground degree different, resulting in a local university the teaching effect is not consistent.

TEACHING METHODS AND REFORM MEASURES

" University Computer Basis " course is a financial basic principle, basic skills and application software for use in one of the college computer courses, computer

technology is developing rapidly, the application software change rapidly, the student area, computer level has bigger difference, in order to achieve the teaching goal, the local college computer basic course group all the research and reform of teaching methods, by means of three-dimensional teaching environment, the implementation of a variety of teaching methods (Zhou, 2012a).

For professional classification education innovation:

Many local universities in computer basic education demand in the new situation, in the face of local university university computer basic course education " non " new form, design the computer basic course education " for professional classification, segmented practice education " teaching philosophy, namely to the university computer foundation curriculum system reform, design for with professional classification teaching and science for segmented practice reform scheme, is also the school students in computer basic course is divided into two categories (Science, literature and Art) and divided into two time sections (1+2, 2+3 semester semester) for teaching.

Theory of multimedia teaching and project driving teaching method:

" University Computer Basis " course, teaching time, wide range of knowledge, content is much, the student foundation is different, each module independence strong characteristic, how to improve the teaching effect, explore the project driven teaching method into the course teaching, the traditional teaching and project driving teaching organically, mutual complement. Through the project driven mode the basic concepts, basic knowledge and practical application, to improve the students' interest in learning, training students to find the problem and use computers to solve problems of consciousness and ability.

Improving of the practice of teaching and improve the students' practical ability:

Local colleges and universities at present on computer for non computer majors in practical ability have a higher awareness, generally increase experiment teaching to improve strength, outstanding students practice ability and innovative consciousness cultivation. Make full use of resources of experimental teaching platform of open experiment teaching management, to improve the students' practical ability and creativity for students with good condition.

Teaching website promoting the students' independent learning:

Some local universities have set up their own

teaching website, can be used in network course teaching, online Q and A, assignment submission, experiment and test questions download section extending classroom teaching area. Network teaching environment to establish, for the students' autonomous learning, open learning provides a good platform; constitute the learning of the course of learning environment, students ways of knowledge acquisition, knowledge and innovation ability training.

Reform of the examination management and examination method:

Part of the local colleges and Universities Based on computer basic course itself unique characteristics and the teaching resources and students practical factors, developed to achieve the teaching goal and actively explore the scientific and reasonable curriculum evaluation manners, encourage students to innovation, reform the way of examination. Such as computer based partially removed using traditional written assessment link and use " practice + report " and other forms (Zhou, 2010).

STUDY OF THE PROBLEM

According to develop the basic research: according to the outline of Teaching Guidance Committee is to release the science and Technology Ministry of education teaching computer and non-computer professional computer basic curriculum committee "on the further strengthening of opinions and computer basic course teaching basic computer teaching in higher school's basic requirements" and other documents, in the development process are with reference to the recent years the employer for non computer professional graduates computer capacity requirements and our school to develop and implement the "Outline" of basic computer courses teaching (Wang, 2011).

Basic knowledge in teaching this course aims to enable students to master the computer, network and other related information technology, training the consciousness and ability of students to use information technology tools to analyze and solve problems, improve the information literacy of the students, to enable students to have in this specialty ability of computer application domain and related work and preliminary application development ability.

Research objectives: In addition to imparting knowledge, cultivating ability of students based on the application of computer and self-study ability, knowledge of the integrated use of learning and problem solving ability and strong self-learning ability, to cultivate students' innovation spirit and innovation ability.

The specific teaching aims to broaden the horizons of students, to prepare the necessary knowledge to learn the following courses, students can consciously experience, introduce some concepts, technologies and methods in Computer Science in their respective professional, students are expected to be at a higher level by using computer, recognize and deal with possible computer problems in the application (Sun, 2010).

The concrete teaching task is to make the students understand the computer hardware structure and composition principle, understand the basic functions of the operating system and some important concepts, understanding of computer network, database, multimedia technology the basic concepts, relevant technology and application field and master computer basic software application skills.

CONCLUSION

Public computer basic course is the non computer professional college students enrolled in their first course, according to the local college itself advantages and defects, to public computer basic teaching should be targeted for education, highlight the basic teaching target, explore the scientific and reasonable teaching methods and means, so that the local universities to make use of their own advantages to meet the employment needs of the community culture with comprehensive application of computer and the ability of independent learning and innovative ability of College students.

Course structure: The "Computer Basics" refers to: (1) The computer culture basis, (2) Computer programming (C language), (3) Computer programming (VB language) based on three courses (Zhou, 2012b).

The school curriculum (1) Computer culture basis, divided into basic culture of computer A (mainly for paper, undergraduate, pipe and other major computer culture basis), B (mainly for undergraduate science, technology, sports and other major computer culture basis) and C (mainly for the specialist Arts) three modules, the College can be selected to open one module according to the needs of professional, from the school of computer science and technology in the academic teaching under the unified leadership, unified whole hours per class template standards and requirements, final implementation of unified examination.

The school curriculum (2) Computer programming (C language), mainly in science, engineering and mathematics education and undergraduate accounting majors. The school of computer science and technology in the academic teaching under the unified leadership, unified whole school standards and requirements, the implementation of the separation of teaching and testing system.

The school curriculum (3) Computer programming (VB language), mainly for the undergraduate paper, through, pipe, sports specialty. The school of computer science and technology in the academic teaching under the unified leadership, unified whole school standards and requirements, the implementation of the separation of the teaching and testing system.

The teaching methods: the teaching of this course to master the concept, strengthen the application of skills training, teaching. According to the different characteristics of the students and professional requirements, in the teaching process (or material) according to different ideas, adopt various forms to teaching. In the teaching process, should actively apply modern educational technology, play network aided teaching superiority, to mobilize students' autonomous learning, exploration heuristic active learning methods, the discussion of type. Attention to differences in computer basic level students, should provide a variety of independent exploration space to students in teaching, encourage personal development. With the development and popularization of computer education in primary and secondary schools, some contents involved basic requirements may have been many university freshmen have. (Zhou, 2012c) Considering the difference between the new computer basis, according to the actual situation, in a variety of ways (such as lectures, through examination, self-learning etc.) to achieve some of the basic requirements of the continue to explore suitable for undergraduate education characteristics and requirements of the teaching methods, pay attention to the application of modern teaching methods, teaching and learning play a leading role in two aspects and the enthusiasm of the teachers, improve the teaching quality and teaching efficiency, in a specified time range, combined with professional features, to ensure the implementation of the overall outline.

ACKNOWLEDGMENTS

First and foremost, I would also like to thank reviewers for constructive reviews and suggestions that improved the quality of this manuscript. This work was funded by the project of Science and Technology of Huanggang (2013020203) and the project of Science and Technology of Hubei Province Department of Education research (B2013138).

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