Thinking on Setting Up Computer Basic Course

Na Wu

Nanchang institute of science & technology, China 35482278@qq.com

Keywords: computer base, course group, setting

Abstract: In recent years, with the increase of college enrollment, the teaching problems have been highlighted. How toachieve the reasonable and effectiveallocation of teaching resources, to do a good job of setting computer basic course in non-computer speciality, to improve the teaching quality of basic computer course, and to promote the level of the education is the problem will be focused on in this paper. The following is mainly discussed from three aspects: the problems existing in the current computer basic course, the ideas of setting up computer basic course and course group in non-computer speciality, and the setting and teaching suggestions of computer basic course and course group.

With the continuous development of computer technology and the continuous expansion of the computer application field, the role and position of computer in various fields is becoming more and more important, has penetrated in various areas in modern science and technology, the computer course is an important technical basic course for every major in colleges and universities. Therefore, all colleges and universities have set up the computer basic course, the contents of the course and the quality of the teaching directly affect the students' ability to learn the knowledge of the follow-up courses and to accept the new technology in the future.

1. The existing problems in the setting of computer basic course for non-computer speciality in colleges and universities

(1) The training program and teaching plan are formulated in general, without individualization, and can not meet the requirements of the students' computer ability.

At present, all colleges and universities have set up computer basic course, and the setting of computer basic courses and course groupis mainly considered from two levels. The first level is to set up the basic courses of computer application, mainly is to teach the basis of computer information technology, the basic of network technology, windows operating system, the application of office software and so on. The second level is to set upprogramming course, such as C, VB, VF and Fortranother programming languages, mainly is to teach the basic knowledge of computer programming, to teach students to master the basic methods of programming and to help students to solve problems in future work. When all colleges and universities set up these courses, they did not distinguish these courses according to their nature of profession, specially the first level teaching did not carry out the formulation of professional training programs, the formulation of teaching plan, the setting and opening of specific courses according to the characteristics of literature, science, engineering and other learningspeciality. Many colleges and universities adopt to set up computer base in the first semester, and with unified teaching material, unified schedule and unified content, and havethe final examination in whole school, even requires that students must participate in the level of national unity prescribed examination. It has some advantages to the teaching which takes the teaching goal as standard, but the orientation for this kind of teaching ignores several problems: (1) There is a difference in the ability of talents in each industry. (2) There are differences in the training objectives of each major, and the requirements for computer technology knowledge are different. (3)There are differences in students, and differences in the demand for information technology.

(2) The teaching content is old and unitary

At present, most colleges and universities carry out the setting of the basic computer course and the course group on two levels, a big part of students actually have been learned and mastered the first level of teaching in primary and middle school, although there are difference in all regions, schools should not serve as the key content to teach. According to the professional characteristics, the students are divided into groups, according to the ability of each group students to develop the learning content, the assessment method and the examination standard. The knowledge related to professional subjects is highlighted, but the knowledge for most students who have mastered and little content related to future majors, teachers need to teach less, to give priority to students review, and teachers can test students' mastery degree by examination. However, the contents of speciality needs and industry needs, there are no corresponding courses in the setting of college computer basic courses and subsequent course group.

(3) There are too many theoretical hours and less practice hours in the setting of course

At present, the manipulative ability and creative ability of collegestudents in our country is low, and the reason is to neglect practice link and experiment course for a long time. At the same time, most colleges and universities are teachers speak much, and the students do less by themselves. For basic computer course, teachers often teach first, let the students according to the steps to complete the design experiment, the students quickly forgot after learned, not only failed to achieve the teaching purpose, at the same time, for the cultivation and improvement of students' innovation ability is almost zero.

2. The ideas of setting up computer basic course and course group in non-computer speciality

Colleges and universities in the setting of computer basic course and course group in non-computer speciality, should be to foster students' ability as the core, combine with the existing software and hardware teaching conditions and actual situation, build a new teaching system, build a hierarchical experiment practice teaching platform of computer basic course group, combine with different professional directions to the specific requirements of the professional basic theoretical knowledge and practical ability, further refine to teaching requirement and characteristics of computer basic course and course group, analyzethe differentiation requirements of each professional direction, on the basis of this, combine the training goal of each major, the "innovative" requirements of higher education personnel training, to study computer basis teaching mode of non-computer speciality, to reform the teaching contents, teaching methods, teaching means, the experimental study, skills, etc, to ensure the engineering ability training ofthe validation of theoretical knowledge, practical ability, work skills, employment adaptability, practical application ability and so on, to improve students' engineering accomplishment.

3. The setting and teaching suggestions of computer basic course and course group in non-computer speciality

(1) Studying the needs of professional talents in various industries, to determine the demand for computer basic course and course group. Investigating and researching the relevant industries in the school, to learn about the training specifications of professional talents in various industries. Researching the professional activities of technical personnelin various industries, to analyze the related professional skills and determine the professional ability, at the same time, to research the related occupational qualification certification requirements standard in various companies. According to the above research, to master the specific requirements of the basic knowledge and practice ability in various enterprises.

(2) To study the common demand and difference needs of computer basic course and course group.On the basis of the research, according to the specific demand and industry characteristics of each industry and the target of information technology in middle schools, to combine with the professional training target, to analyze and research the common needs and the differentiated

demand of knowledge and practice ability for computer basic course in different speciality, to lay a solid foundation for the next step of teaching task.

(3) Determine the corresponding ability target of each specialty, and set up the basic computer course and the course group.Formulation of the outline should be based on the demand of professional categories in the ability to understand the various industries, to determine the content of each professional computer ability of students should master, and then to determine students' ability training goal of the basic computer course and the course group, to formulate the outline of computer basic course and course group, and to accordingly reform and adjust the corresponding teaching activities, in order to train the application talents who meet the needs of the society and all industries and have the core competitiveness.

(4) The design of computer basic course syllabusEach professional and revision of the training scheme is based on the completion of previous work, to complete the design of computer basis teaching outline, to accurately grasp the teaching contents, emphasis and difficulties. And through the overall optimization of teaching contents and course system for computer basic course group teaching, focus on students' ability training, to determine ability of target, to design thecourse theory, to achieve the concrete form and content of practice teaching , and then to formulate the outline of computer basic course and course group, to revise the talent training scheme, and to strengthen practice teaching. The course planning in training program takes the ability as the main line and takes the cultivation of students' engineering quality and practical ability as the center.

(5) Establish a hierarchical course structure, and set up the capacity target in each major. On the basis of setting up the outline in computer basic course and course group, we carried out the propose of a "three-level" course system for computer basic course and course group teaching. The first layer is computer basic ability education. The contents of this level is mainly to teach computer technology base and network technology base, the Windows operating system and the application of office software, and the brief introduction of latest computer information and technology. Set upthe computer basic course in the first semester of college.For this part, considering that primary and secondary schools already have the study of relevant courses, so as to reduce the teaching of the explanation, and to adopt the project teaching method to guide the students to study. The second level is the basic ability education of the subject computer. For the education at this level, according to different courses to set up different majors. Because different industries have different needs for students, the training objectives of each major are different, should be accordance with the outline requirements of professional ability, implement the plan of professional teaching, set a number of the compulsory courses and elective courses of tools and software in computer speciality which students should be mastered, students choose courses to learnaccording to their own hobby and specialty. The third layer is the ability extends education of subject professional computer. This level is a higher level computer foundation education, which is based on education of professional discipline, focuses on expanding the computer capability of the subject and cultivating students' innovative research ability, and courses can be offered in the form of public electives.

(6) Use the layered teaching mode, at the same time, make full use of network teaching platform to carry out two-way teaching. First, on the basic of determining the ability outline and training scheme, students in different majors should be adopted the hierarchical teaching, and divided into several levels according to the level of computer application, not only make it according to their aptitude, but also enhance the initiative and enthusiasm of students' learning, the learning efficiency is improved. Second, using the existing network resources to set up the classroom teaching outside, to guide students to autonomous learning. Using the network teaching platform to discuss the interactive learning, to encourage the communication between students, and teachers and students, to enhance students' communication and cooperation ability, to improve the learning interest.

4. Conclusion

Colleges and universities are the place to cultivate and transport the talents.Cultivating high-quality talents, is the most important work and tasks of colleges and universities, and to truly implement quality education, ultimately reflect in the school curriculum, it is related to the quality



specification of personnel training. The reasonable setting of computer basic course and course group in various majors plays a very important role to cultivate the students' ability, the success of it's reform directly affect whether can improve the quality of the college computer basic education. On this basis, we need to further implement the reform of teachers' teaching methods and models and the construction of teaching staff, so as to further improve the teaching quality.

References

[1] Li Zhang, Lin Zhang. Research and reflection on computer basic education for non-computer speciality in Chinese and foreign[J].Computer education.2009(23).

[2] Bin Tian. A little reflection on the course construction of undergraduate computer speciality [J].Education and occupation. 2010,7.

[3]QiongYany. Thoughts on setting up computer basic course and course group for university non-computer majors under the new situation [J]. College entrance examination paper.2015(24).

[4]Shuhua Liu, Guanyu Chen. Thinking on reform of computer basic course for non-computer majors in universities [J].Digital world.2017(4).

[5]Hui Yang, Yan Yang. Thoughts and practices on freshman seminar in computer speciality[J]. Computer education, 2016(3).