On the Cultivation of Computer Software Talents in Higher Vocational Colleges

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Abstract: With the progress of education reform, both the training quantity and quality in the cultivation of computer talents in higher vocational colleges have achieved remarkable results. However, there are still some defects and deficiencies in the specific training work, which is difficult to meet the needs of modern society. This paper analyzes the reality of computer software talents, puts forward the problems existing in the training activities of computer software talents in higher vocational colleges, and formulates the training measures of computer software talents in higher vocational colleges.

1. Introduction

Recently, with the fast progress of science and technology, diversified technology has been widely applied in various fields, especially computer technology has been widely infiltrated in various fields, playing a significant role in people's daily life and production activities. With the fast progress of the software industry, the requirements for computer professionals are more stringent. In addition to mastering the knowledge of computer hardware, they should also have the ability of software. To speed up the improvement of China's comprehensive national strength, China is vigorously cultivating computer software talents.

2. Reality of Computer Software Talents

In software enterprises, the required software talents have a variety of levels, including project analysts, program designers, industry experts, programmers, etc. Among them, the demand of programmers is the most prominent, and the comprehensive number of demand analysis designers, program designers, project analysts is usually less than 20%. The work of these personnel usually starts from programmers. Therefore, the programmer belongs to a basic work position. In software enterprises in China, there is a kind of programmer who lacks the formal project concept, but is very skilled in programming tools, has outstanding ability and can quickly and efficiently complete coding activities. Another kind of programmer has outstanding theoretical knowledge. Although their programming speed is not outstanding, their system analysis and module design have very high standardization. The development prospect of such personnel in software enterprises is very good. In enterprises, the reasonable proportion of these two types of personnel should be 10% and 90%. The second kind of personnel is also called software workers, which has low technical requirements and attaches great importance to the specification. However, in the software enterprises in China, the first kind of programmer occupies a very high proportion, which is contrary to the software engineering talent structure advocated. For factories, pyramid is a scientific talent structure. Therefore, the most important work at this stage is to train more standard programmers.

3. Problems in the Training Activities of Computer Software Talents in Higher Vocational Colleges

3.1 Lack of Scientific Market Orientation and Training Direction

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In the education of higher vocational colleges, some colleges still lack specific guiding ideology of running schools and education, but attach importance to education background and pay less attention to students' skill training activities. In the specific teaching activities, the training mode mainly includes specialized type and undergraduate compression type, which ignores the cultivation of students' hands-on ability and makes it difficult to make the talents trained in higher vocational colleges meet the needs of market economy. The computer courses of higher vocational colleges emphasize practicality very much. However, in the specific teaching work, the knowledge structure and skills content have been seriously behind the progress of the times, which has affected the improvement of students' operation and innovation ability, so they are difficult to be qualified for the future post.

3.2 Lack of Rationality in Teaching Mode and Assessment Method

As for the training activities of computer software talents in higher vocational colleges, it is related to the education and training mode of ordinary colleges. The design of curriculum mode mainly includes professional courses, professional basic courses and public courses. This curriculum mode is more suitable for students' learning habits, discipline, integrity and other aspects, can help students master more theoretical knowledge, but it does not focus on cultivating students' practical ability, so it is difficult to meet the specific market needs. In the specific teaching work, teachers still adopt the traditional teaching methods, first put forward the concept, explain it, and then give examples. In this teaching activity, students only passively accept the knowledge content, and can't show the practicality and innovation of the major. When evaluating students' learning effect, teachers still only use the form of written examination, so it is difficult to systematically evaluate students' software professional ability.

3.3 Lack of Professional Faculty

In the training activities of computer talents in colleges, teachers play a vital role. At the present stage, most of the software teachers in higher vocational colleges graduate from colleges and universities, and usually start the teaching work of vocational schools after graduation. In other words, most of the software teachers have not worked in the front line of enterprises. Therefore, teachers lack practical experience, difficult to carry out vocational training, and the knowledge content explained in the classroom can't adapt to the progress of the times, affecting the teaching quality and students' learning effect.

4. Training Measures of Computer Software Talents in Higher Vocational Colleges

4.1 Optimize Curriculum System and Content

In the training activities of computer talents in higher vocational colleges, the optimization of curriculum system is one of the key contents. While carrying out specific work, we should change the traditional education mode, put the professional post needs in the main position, carry out various teaching activities around the cultivation of students' ability, and make clear the relevant curriculum system and content based on the cultivation goal. When carrying out teaching activities, teachers should also change the traditional teaching methods, put the practice class and the theory class in the same position, and connect the two closely. On this basis, the teaching plan can be designed. In the teaching activities of theory course, the teaching goal is to focus on the use of knowledge content, to ensure that the constructed theory course system has the characteristics of technology application. Practice class includes experiment class, practice class, technical training class and other diversified application forms. Teachers can combine theory with practice into a whole. In terms of teaching content objectives, the unity of the two should be fully guaranteed, and the characteristics of computer software specialty should be reflected.

4.2 Change Traditional Teaching Methods

In the training activities of computer talents in higher vocational colleges, the innovation goal of teaching methods is to make the teaching activities more vivid and help students understand and

master the relevant content. The optimization of teaching methods mainly includes the following points.

First, the majority of teachers should focus on the research activities of teaching methods, based on the characteristics of students' knowledge structure and learning habits, help students actively carry out relevant exploration activities, promote students to actively find and solve problems, and play a good role in training students' thinking. For example, in the specific teaching work, the teaching method of computer principles is mainly explanation activities. As for the courses of advanced language and software application, the teaching method needs to connect classroom explanation with computer practice. The system development and other courses usually choose the case teaching method.

Second, in order to fully mobilize students' interest in learning, teachers also need to fully use multimedia and teaching aids in specific teaching activities to enhance students' practical ability through diversified teaching methods.

4.3 Vigorously Carry out the Faculty Construction

There is a close relationship between computer software and practice, so it is a must to carry out relevant optimization activities continuously. In the training activities of computer software talents in higher vocational colleges, to speed up the development of talent training activities, the update speed of teachers' knowledge should meet the needs of the development of the discipline. Most of the software teachers come from colleges and universities, lack relevant technology, affecting the improvement of classroom teaching efficiency to a certain extent. In the face of this situation, higher vocational colleges can vigorously carry out teacher introduction activities, recruit high-level teachers with work experience from enterprises, arrange young teachers with high academic qualifications to go deep into enterprises and join in the production or scientific research activities of enterprises, so as to promote the teaching ability and level of teachers. Higher vocational colleges should also vigorously carry out the construction of part-time teachers. In some professional practice courses, senior engineering and technical personnel can be invited to carry out teaching activities, which can help students understand advanced professional knowledge, ensure that students master more professional skills, and improve the effect of practical teaching. In addition, higher vocational colleges can also invite professors, scholars or experts from some industries to organize lectures in schools on regularly, which can help students understand the frontier knowledge content of the field, promote the majority of professional teachers to master more knowledge and technology, realize the improvement of their professional ability and level, and promote the progress of teaching activities.

4.4 Strengthen the Diversification of Assessment Activities

The main purpose of assessment is to evaluate students' mastery of knowledge and skills, which can help teachers better understand the teaching effect. Single assessment form is difficult to meet the development needs of higher vocational computer students. In the assessment work, teachers should use the form of comprehensive assessment, infiltrate the assessment content in all aspects of teaching, and focus on the assessment of basic knowledge, classroom performance, task completion and other aspects of ability. Teachers can also help students to set up development teams in the form of skill assessment to ensure the realization of development projects in teams. In this way, students' mastery of curriculum knowledge, communication ability and cooperation consciousness can be investigated.

5. Conclusion

While developing computer software talents training activities, higher vocational colleges should greatly focus on the dominant position of students, give full play to the guiding role of teachers, and strengthen talents training activities according to social needs. At the same time, it is also necessary to closely link the content of theoretical knowledge with practice, help students master more knowledge content, strengthen students' ability to use knowledge, accelerate the development of

students' innovative activities, promote students to have more team spirit, and create good conditions for students' future development.

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