

Teaching Innovation of Computer Specialty Based on Vocational Education

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Abstract: The main goal of vocational education is to cultivate skilled talents. Compared with ordinary colleges and universities, vocational colleges are weak in the ability to speak, in the teaching process, they also pay more attention to some practical courses, less theoretical research, unable to provide theoretical guidance for enterprises. This paper discusses the current situation of computer teaching under the background of vocational education, and puts forward the teaching innovation strategy of computer specialty in vocational education.

Keywords: Vocational Education; Computer Science; Current Situation; Teaching Innovation

With the advent of the information age, the country needs more and more high-quality computer talents. As the first driving force of national development, innovation plays an important role in the process of computer teaching in higher vocational colleges. Therefore, higher vocational colleges are required to change the traditional teaching mode in the process of computer teaching. They should not be satisfied with the mastery of traditional theory and technology, but should use more energy to stimulate the enthusiasm of students to learn computer, mobilize the initiative of learning computer, to cultivate students' innovation ability, so as to improve the efficiency of computer teaching in higher vocational colleges, improve the core competitiveness of students, and make them more adapt to the needs of the post.

1. Current situation of computer teaching in vocational education

1.1 Teaching and learning do not coincide

Under the traditional education mode, the higher vocational computer teaching method mainly uses the language transmission of the above courses. The whole process can be summarized as three steps: "teachers give lectures, watch the teachers' operation demonstration and students' practice on the computer". The whole process revolves around the theoretical knowledge, and the teachers are in the teaching center, while the students are in a very passive and subordinate position. From the perspective of "what is learned", the foundation of traditional teaching is objectivism. In the process of teaching, students can only choose to accept knowledge, but they are not allowed to participate in the process of knowledge discovery and system establishment. Students' learning is literally "reading", memorizing the theoretical knowledge taught by the teacher by rote, and those left in the notebook are not fully understood and input into the brain, so only superficial knowledge and some superficial knowledge can be learned. In this mode, over time, students' enthusiasm and innovative spirit will also be hit, which is not conducive to stimulate students' practical interest.

In terms of "what is taught", teachers' thinking on curriculum design and teaching methods are all centered on "how to teach", and seldom consider students' "how to learn". If teachers only consider problems from their own perspective, it is very easy to ignore whether students can absorb and how much they can absorb. If the interaction between "teaching" and "learning"

is lost, what the teacher teaches cannot be accepted, and the students are unable to feedback their own mastery and learning experience to the teacher, then naturally, the teacher will not be able to adjust his teaching methods in time according to the feedback of the students, so that “teaching” and “learning” cannot reach a harmonious and unified situation, and the so-called individualized teaching will become empty talk.

On a more realistic level, the traditional teaching methods of teachers’ “what is taught” and students’ “what is learned” are seriously divorced from the practical application in the real society. In the whole teaching process, the first step is to formulate the teaching content according to the syllabus, determine the order of knowledge to be explained by the compiling order of the specified teaching materials, and explain the theoretical knowledge and operation of the book to the students concretely, so that finally let the students practice on the computer. Under such a process, the knowledge learned by students is modular and fragmentary, which is not comprehensive and practical. After visiting and investigating the students, this result should also be proved. When it comes to real application, most students cannot solve problems by themselves and cannot apply what they have learned.

1.2 Inconsistent goals and effects

In the traditional teaching mode, as the starting point and destination of the whole education system, teaching objectives have absolute height and status. Teachers can determine the content to be taught by analyzing the teaching objectives, and the teaching objectives become the basis when the teaching effect is checked and the teaching level is evaluated at the end of the semester. In this case, the teaching will pay attention to the goal and ignore the behavior goal, and lead to the inconsistency between the educational goal and the expected teaching effect.

Higher vocational education is the main part of vocational education, which shoulders the responsibility of delivering a large number of qualified talents to the society. There are a variety of social jobs, and these positions need to be able to be competent for the content of the work, to perform job responsibilities, with professional skills. Therefore, as the training of front-line technical personnel in higher vocational education, its teaching objectives should be set according to the requirements of different industries and positions for employees, which is also the positioning basis of higher vocational education. Nowadays, the Internet world is changing with each passing day, and the computer technology is updating very fast. Therefore, the computer professional education in higher vocational colleges needs to consider the possibility of future career changes. In addition to mastering the basic principles and rules of theoretical knowledge, we should have practical ability and skilled operation ability of different kind of professional software in practice. However, under the influence of traditional teaching ideas, the current higher vocational computer professional education emphasizes too much differentiation between disciplines, and there is no mutual communication between them, so interdisciplinary learning has become empty talk. The graduates trained in this mode have narrow knowledge and incomplete mastery of skills. They can only use Photoshop for image processing and Word for office software. When they are really working, Light room, voice and shadow, PowerPoint and so on may be used. In the absence of self-study ability, these graduates can only do nothing, leading to their weak competitiveness in the job market and narrow employment scope.

1.3 Different student foundation is not conducive to the development of teaching activities

Many students in higher vocational colleges are more systematic and comprehensive understanding of computer knowledge for the first time. Some students’ previous understanding of computer knowledge stays at the most basic surface knowledge. However, due to the influence of their interests and hobbies, the computer level of some students may be relatively high, and the basic computer teaching cannot meet their learning needs. This requires teachers to use different teaching methods for different students, but at present, there are fewer teachers. A teacher often undertakes the teaching task of many classes, with heavy teaching task and large pressure as well as limited time. In the teaching process, it is not conducive to the improvement of students’ learning ability and the cultivation of innovation ability without targeted teaching method.

2. Teaching innovation methods based on computer specialty in vocational education

2.1 Cultivating students’ innovative consciousness in vocational education

With the development of quality education and education reform, teachers should also change the traditional teaching concept, teach with pleasure, improve the interest and effectiveness of classroom teaching, and improve students’ interest in

learning, mobilize students' learning initiative with interest, in order to let students learn computer knowledge in a relaxed atmosphere, transfer more initiative to students in computer class, and teachers should transfer more initiative to students. Teachers are more responsible for the role of a guide, guide students to think actively, and cultivate students' innovative consciousness.

2.2 Computer teaching should be individualized

The basis of each student is different, so it is impossible for teachers to adopt unified teaching methods in the process of teaching. Teachers should make different teaching methods according to different students. For the students with poor foundation, more time and energy should be put on the mastery of basic knowledge at the initial stage, and the basic level of students should be improved step by step. At the later stage, the cultivation of computer skills and innovative thinking should be strengthened. For students with good foundation, we should guide them to carry out social practice, broaden their learning channels, and improve their innovation ability and level in social practice.

2.3 Improve the practical ability of computer major students

The cultivation of teaching practice ability plays a very important role in cultivating students' innovation ability. In the process of computer teaching in higher vocational colleges, we should pay attention to strengthening the contact with enterprises, and actively carry out school enterprise merger, in order to provide more opportunities for social practice for students, exercise students' practical ability and social practice ability in the process of social practice, and cultivate students' innovation consciousness and creative thinking.

2.4 Using information technology to innovate teaching classroom model

Under the background of "Internet +" education, students' sense of responsibility for autonomous learning is enhanced, and their initiative in learning is improved. In addition, computer basic teachers can pay attention to students' learning dynamics at any time, and innovate computer basic teaching mode in their spare time to promote combined with students' learning state. Teachers of computer foundation can also build micro classroom according to the application of "Internet +" mode, and combine computer basic skills with micro lessons, in order to bring better learning experience to students, teachers can enrich students' teaching by making PPT, computer skills competition and so on, creating a strong learning atmosphere and improving the quality of computer basic teaching.

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