

Research on College basic Computer Teaching under the Mode of Application-Oriented Talent Training

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Abstract. With the development of the times, the college basic computer teaching has become an important subject. Starting from the connotation of application-oriented talent training, through the investigation of freshmen's computer application level, and based on the present situation of college basic computer teaching, this paper puts forward a hierarchical teaching method based on team report, as well as an assessment criterion combining classified assessment, stage assessment and process assessment.

Keywords: Computer Teaching; Hierarchical Teaching; Stage Assessment; Talent Training.

1. Introduction

At present, undergraduate universities whose graduates' practical ability is not as good as that of technical schools, and scientific research abilities are far from those of the first-class universities are in a worrying situation. Based on this situation, universities with undergraduate education as their main part should pay more attention to the cultivation of students' application ability, therefore the cultivation mode of applied talents will become the inevitable trend of their development [1]. To a certain extent, this model that is to solve three major problems of "what to teach", "how to teach" and "how to test" in essence can not only meet the growth needs of the educated, but also meet the different needs of the economic and social development. The advantages of this model that perfectly combines theory with practice are improving the previous single teaching, practice and assessment pattern, simplifying theory, highlighting the cultivation of students' practical ability, which really achieve the target of learning for practice [2] and is a kind of mode that we should vigorously promote.

2. The Problems and Strategies in Current College Computer Teaching

2.1 The Investigation on the Freshmen's Computer Level.

In order to understand the current situation of freshmen's mastery of computer knowledge, we had selected some freshmen as the subjects of the survey in the past three years, and counted their computer application level through the form of questionnaire survey. Table 1 is the investigation result of the freshmen's computer level. The details are as follows:

Table 1 The freshmen's computer level

Familiarity(%) year	Not at all	General	Skilled	More Skilled
2016	10%	58%	20%	12%
2017	6%	44%	30%	20%
2018	2%	39%	31%	28%

From the table, we can see that the computer operation level of freshmen varies from good to bad, most of students already have a certain basis for computer operation. With the popularization of

computer, the proportion of students with zero foundation decreases year by year, most of freshmen is in a general state, there are not many students who are proficient in computer operation.

Therefore, in view of this situation, the previous teaching methods must be adjusted accordingly in order to adapt to the actual situation of students and the development of the times.

2.2 The Characteristics of Computer Course in Universities.

As a basic course of computer education system in university, computer foundation which belongs to the compulsory module of public basic courses in our university is a course with large amount of theoretical teaching information, strong practicality, many skills [3] and so on.

College computer course not only contains a large number of practical skills, but also covers lots of theoretical knowledge. Although its theories are not as deep as those of many professional courses. But at present, in our current training plan, theoretical class hours are only 15, which is also a challenge for teachers to impart more theoretical knowledge to students in so limited hours.

Comparatively speaking, computer course is a practical and skilled course, based on which, the operating class hours should be prolonged to ensure that students have enough time to cultivate practical operating skills and truly achieve the teaching purpose of this course.

2.3 The Problems in Current College Computer Course Teaching.

Students lack initiative learning ability and over-depend on teachers, which is particularly prominent in the computer experiment. Some students when encountering problems think firstly about to ask others and do not actively think about solutions to problems, there are also some classmates that can only operate under the guidance of teachers [4], and still cannot complete independently when encountering similar problems next time. This also reflects that students lack the ability of active thinking.

The unbalanced distribution of school hours in theory and practice is a common phenomenon in the teaching process of computer course for teachers. The degree between the class hour of theory and practice should be adjusted according to the actual situation of students, instead of being uniform, at the same time, that is also a difficult thing to grasp.

Influenced by personal, family, education, social environment and so on, students' computer level is uneven, which is particularly prominent in recent years. Some students that have a good foundation, they would feel that the content of classroom teaching is too "pediatrics", but others who have poor foundation cannot understand. If we do not adopt differentiated teaching mode, it may affect finally the actual teaching effect.

In computer teaching, the phenomena of single teaching method and low teaching efficiency are ubiquity. At present, computer course still adopts traditional multimedia teaching combined with operation, although it has many advantages, such as large amount of information, high efficiency and so on, it also has some inevitable disadvantages, such as restricting students' imagination, reducing teacher-student interaction, and so on. In addition, some teachers lead the classroom and students listen passively, which will increase the differences among different basic students [5].

The assessment method is rigid and inflexible. As we all know, an important means of assessing the teaching quality and students' learning effect is the course assessment which can also reflect the teaching effect of a course. At present, many majors still regard score as the only criterion to measure students, and the assessment method still tends to emphasize theory rather than practice, and emphasize knowledge rather than ability. On the contrary, this kind of assessment method of heroes based on fractional theory will become a shackle restricting the development of students.

3. The Strategies Solving Problems

In view of the lack of students' autonomy, the countermeasures are that teachers must take active guidance. After studying the syllabus and purpose of teaching, teachers should carefully design teaching methods that are in line with students' existing knowledge level, pay attention to heuristic teaching, and gradually guide students.

In view of the unbalanced distribution of school hours, the solution is to adopt the teaching method of lecturing intensively and practicing more, focusing on operating, in which lecturing intensively is the premise, practicing more is the core, and operating is the important link, which is indispensable.

In view of the uneven level of students, the hierarchical teaching method should be adopted. Firstly, teachers should find out students' actual abilities by questionnaires, small tests and so on, at the beginning of the semester. Secondly, according to the analysis results, students are divided into different levels, and then different teaching methods and assessment standards are formulated according to the ability of students. Student-oriented, so that every student can get their own path of success in education.

In view of single teaching mode and low teaching efficiency, besides the traditional multimedia teaching method, case-teaching method should be used. Some contents in computer are abstract and difficult to accept, based on that, teachers should quote examples close to life and adopt case-based teaching methods to guide students to learn actively instead of full-class irrigation teaching form.

In view of the rigid form of assessment, teacher should adopt a combination of stage examination, classified assessment and process assessment to comprehensively measure students. Computer course is essentially a subject that pays attention to application, therefore, teacher should construct a kind of assessment method emphasizing students' application ability, it is not scientific to adopt only "one paper decides success or failure". The assessment scheme should focus on skills and properly increase the proportion of skills test, at the same time, the criterion of evaluation should adopt the combination of stage assessment, classified assessment and process assessment, and let it run through the whole teaching process. The details are as follows:

Table 2 The detailed rules for classified assessment

Category	Key points for assessment	Remark
Zero foundation	Simple operation	Basic computer skills such as typing
General foundation	Extended operation	Higher Skills such as in doc production
Better foundation	Creative Skills	Difficult Skills such as inquiry design

Table 3 The detailed rules for process assessment

Item	Proportion	Remark
Attendance	10%	Those who miss class three times without reason fail to pass exam
presentation	10%	Active speakers will get 0.5 points per time
Group Report	10%	Ranking score based on team performance
Practice on computer	20%	Scoring based on practise performance
Homework	10%	Scoring based on coursework
Network Course	10%	Scoring based on the actual network courses
Course summary	10%	Scoring based on course summary
Final exam	20%	Scoring based on theory plus computer exam

Finding out the students' foundation is the key of computer teaching, adopting reasonable teaching methods and improving assessment modes are the important means, and its goal still is to train applied talents with self-learning ability.

4. Summary

As one of the fastest growing subjects in today's society, computers have become a tool, a dictionary, mastering computer knowledge has become a necessary skill for us, without it, the future is bound to be difficult. How to culture application talents with equal emphasis on quality and skill and how to keep the curriculum reform up with the pace of times are still a long-term strategic project in the future. As an educator, we should actively explore effective educational reform program, and continue to make a modest contribution to the development of schools and social progress.

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