

Primary Exploration of Teaching Mode Innovation—Progressive Teaching and Three Classes Linkage

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Abstract. As to the problems occurred in learning ASP.NET course by the students majored in software in higher vocational colleges, we shall start with analyzing the job requirement and educational objectives, and suggest to apply the teaching mode of Progressive Teaching and Three Classes Linkage into ASP.NET course teaching, so as to discuss comprehensively from three aspects: content selection of three classes, teaching method and evaluation method.

Introduction

ASP.NET program design is the key course of software technology major in higher vocational colleges. For the students in higher vocational colleges, this course covers wide scope of knowledge, and is very practical, which asks for strong foundation of theoretical knowledge and skillful practical operation ability. As the students in higher vocational colleges have poor self learning initiative, diversified development, with only the intensive teaching by the teacher, and with the sole project penetrating the entire semester teaching, the outstanding students are difficult to acquire more knowledge, and the intermediate students are hard to enhance their learning level, meanwhile some students with learning difficulties shall dislike learning due to failing to keep up the pace. That's why we must seek a path of development that suits the ASP.NET course teaching in higher vocational colleges. The writer shall start with analyzing the educational objectives and the characteristics of the students, and put forward the teaching mode of Progressive Teaching and Three Classes Linkage, and discuss comprehensively from three aspects: content selection of three classes, teaching method and evaluation method.

Educational objectives of ASP.NET course

The education in higher vocational colleges is the employment-oriented vocational education, so the educational objectives of ASP.NET course we defined is: train the students to master the basic method of Web application program development; cultivate the students' ability to develop mediate- and small-scale Web application program, and form good programming habit and form good spirit of team cooperation; cultivate the students' ability of self-learning and innovation. Thus, the writer suggests to divide the students in three layers: 70% of the students are qualified for the work of Web programmer, tester, pre-sales and after-sales technical support; 20% of the students is competent with the work of ASP.NET website development programmer, website design engineer and Web engineer; and 10% of the excellent students are competent with the work as system analyst and project manager.

Learning characteristics of the students in higher vocational colleges

A. Study interest

The learning of the students in higher vocational colleges is very emotional, which mainly expressed as the following: they have higher learning enthusiasm to what they are interested, and have less learning enthusiasm to traditional knowledge; they have more interest to practical

operation knowledge, and have less interest to theoretical knowledge; they have great interest in the course which is what you learned is what you acquired, and have less interest in boring programming; they have great interest in the course which is taught in diversified forms, and have less interest in the course which is taught the sole teaching mode; they have higher enthusiasm in team work with sense of competition, and have less enthusiasm in leaning as dispersed individual.

B. Subjective initiative of learning

The students in higher vocational colleges have poor subjective initiative of learning, and are lack of persistent attitude, and when encountered with knowledge that is hard to understand, they shall have psychological problems as disliking study, so the teacher's guide and supervision is a must. When the teacher is absent, the students teams can play a great role of encouragement and promotion.

The application of teaching mode as Progressive Teaching and Three Classes Linkage

A. Construction of the system of Progressive Teaching and Three Classes Linkage in ASP.NET teaching

When reached to 1/3 of the traditional teaching process, the teacher shall divide the students into three levels according to the daily performance and the test result of the students. The students in the first level shall continue studying in the first class, and the students who can enter the second class shall enter the second class to study besides what they need to learn in the first class, and the students with good performance after learning in the second class and the evaluation after a period of time shall enter the third class to have practices.

The first class is the traditional class, which teaches basic knowledge with teaching method combining theory with practice. The second class is to organize the students with active thinking, certain creativity and self-learning ability into several studios, to develop after-school Web project on the subject of annual national and provincial contest, meanwhile, train them to obtain the certificate. Each studio shall have an adviser. The third class shall assist the students that have good performance in the first and second class to establish virtual corporation, undertake the actual project from real enterprises. All the process shall be taken as the steps of a company, and establish many departments, such as website development department, website test department, website operation and maintenance department. Help the students operate the whole company, and enable the students to simulate the operation of a company during school time, and suit the work pace in advance.

B. Content selection of three classes

Three classes reflect the progressive and deepening teaching method, which enables the students to master the basic theoretical knowledge and practical skill first, then focuses on undertaking projects, to promote learning with contest, and then experiences the job responsibility of the real work. Thus, the selection and the organization of the content of the three classes should reflect same teaching objective with different emphasis.

In the first class, the teacher should start with the project which is familiar with the students and that are interested, for example, taking WebQQ as main teaching project, which is easy to understand and easy to master.

In the second class, the teacher mainly choose the project aimed at contest or the project in the college, such as OA system of MicroStar web page competition, campus OA system of campus project, to express the purpose of promoting learning with competition and win-win for competition and learning.

In the third class, the adviser shall undertake the real project in the real enterprises, such as the TCL import and export trading system, which shall be done by the virtual company established by the students with the teacher's tracking and supervision all the time.

C. Teaching method and means of three classes

In the first class, we take project-oriented teaching method, and divide the main project into several tasks. Each teaching unit corresponds to a task. The teacher shall demonstrate the whole teaching case, then explain step by step and lead the students to operate, and finally, have the students practice. While, the teacher shall give deep individual tutoring for certain students to

deepen the understanding and master the operation process.

In the second class, the teacher shall carry out tutoring and teaching in the studio in his/her spare time, group and assign roles, to have the students experience different job responsibilities during the working process, which can not only promote team cooperation and communication skills, but also cultivate the students' ability to complete work from different post.

In the third class, the adviser shall take part in the development of enterprise project as a supervisor and administrator. The students shall do their part to complete each project, conduct a regular meeting, discuss the existing problems during the development and implementation, and discuss the further plan. The teacher shall check the students' work regularly, offer help to the students with difficulty, and organize the students to communicate with the customers.

D. Relationship of three classes linkage

The teaching of three classes supplements each other and are inseparable. Adequate linkage of three classes is the key to guarantee the teaching quality. Follow the following principles.

1) Uniformity

Three classes shall take cultivating the students to master ASP.NET website development ability as the objective, and carry out the project-guided teaching work which is students-centered and teacher-assisted.

2) Progressiveness

The first, second and third class is actually the basic, advanced and high-level stage of ASP.NET course. The first class is the widespread traditional class that all students attend; the second class is for the students who have more learning capacity and want to make further development; while, the third class is for the excellent students picked from the second class. So, three classes well reflect the progressiveness.

3) Permeability

The permeability mainly reflects in the content permeability and students permeability. Content permeability refers to the teacher shall mention some projects and tasks in other classes when teaching in the three classes, to have the students know a thing or two. For example, in the first class, the teacher shall mention some contents learned in the second or the third class, to have the students have more learning capacity to have a try, so as to exploit some students with strong ability. Students permeability refers to the students in the first can take part in the peripheral work of some projects in the second or third class as the helper or the learner, to have the students with limited ability to take part in more advanced class learning, on the other hand, urges the students in the first class to try to learn the contents in this class, and make good preparation for more advanced class.

E. Evaluation of three classes

Evaluate the students in three classes regularly and eliminate the incompetent students. Evaluation methods can be divided as daily performance appraisal and achievement appraisal. Students who pass the evaluation can enter more advanced class, and the students who fail the evaluation shall degrade to the lower class to master the basic knowledge. The final grade can be given taking consideration of the performance and achievement in three classes. By this mechanism, the students shall have momentum of "competition, study, overtaking, help and surpassing", so as to enhance learning interest.

Except for evaluating the students, the teachers shall be evaluated. The teacher need to teach well in the first class, meanwhile they need to give the students guide in the studio and virtual company. The teacher can be evaluated through attendance rate, students' feedback and achievement. And the teacher who passes the evaluation can continue to guide the students in the studio and in the virtual company, and the teachers who fails the evaluation shall continue teaching in the first class.

Summary

The teaching mode of Progressive Teaching and Three Classes Linkage well solve the

problems of lack of communication between the teachers and the students, and the students disliking learning, which promotes comprehensively the students' basic theoretical knowledge, technical development level, task executive capability, project management ability, so they can more fulfill the demand of the society to ASP.NET talents. Meanwhile, to carry out this teaching mode proposes high demand to the teachers, that is, the teacher should have the ability to teach well in the first class, and also, they should give up their spare time to give offer to the students in the second class, and contact with the enterprises more to carry out the cooperation between the colleges and the enterprises, and to exploit more actual project for the students in the third class. In addition, it also boost the development of one course, and what's more, have a far-reaching influence on the professional development.

Reference

- [1] Dan liu, Kun Yu. ASP.NET trinity of program design course teaching reform research [J]. Journal of henan mechanical and electrical college,2011, 5(3): 118-119, 122.
- [2] Hong Ceng. ASP.NET course teaching reform and practice [J]. Journal of manufacturing automation,2011(2): 172-174.
- [3] Jing-jing Hao, Xiang Li. ASP.NET course teaching do exploration and reform of teaching mode the unity of [J]. Journal of electronic commerce, 2012(6): 85-86.