Teaching Research and Exploration of Javascript Programming Course in Application Oriented University

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Abstract

With the rapid development of Internet technology, the development technology of web front end based on javascript technology is developing rapidly, in the process of college education, the course of JavaScript programming is more and more perfect. This paper studies and explores the teaching status and Strategies of JavaScript programming course in Application Oriented University, using the project driven teaching method, combined with the method of process based curriculum grades evaluation to evaluate students' performance. It aims to improve the teaching level of JavaScript programming course, to stimulate students' interest in learning, we should mobilize students' self-study spirit, improve students' practical ability, and then improve the quality of teaching, achieve good teaching results.

Keywords

JavaScript programming; Project driven teaching; Process based curriculum grades evaluation.

1. INTRODUCTION

With the continuous deepening of quality education, the application-oriented undergraduate education has been paid more and more attention. The teaching goal of application-oriented universities is to cultivate skilled talents, which has both theoretical basis and practical ability, especially the practical ability. With the rapid development of Internet technology, the web front-end development technology with javascript technology as the core develops rapidly. The course of JavaScript programming is currently a basic course for computer majors in Colleges and universities, and a powerful tool for software development. JavaScript is an object-oriented and event driven script language for web design. Students can learn the process and logic of relevant programming, and lay a foundation for future software development.

Strengthening the reform of teaching concept and teaching method of JavaScript programming course is an important content of research and exploration in the current teaching process of JavaScript programming course. Especially under the premise of the increasing demand for skilled talents in the current society, we must actively strengthen the innovation of teaching JavaScript programming course, and the teaching should be oriented to practice and work practice Students have a deeper understanding of relevant knowledge to improve the design level of interactive web pages.

2. THE CURRENT SITUATION OF CURRICULUM

JavaScript Programming is a basic course with high requirements for hands-on practice. In addition to theoretical knowledge, it is also necessary to use the knowledge learned for hands-on practice. The traditional teaching mode is basically a full-time teaching mode for computer teachers. They hope to teach each other all the knowledge in their stomachs, cramming teaching,

and more dependent on the computer room, and even many computer teachers need to be in the computer room to be good A complete course, but in the ordinary classroom, even if there is projection assisted teaching, it can not be taught or the effect of class is not good.

In this process, students passively receive knowledge and can't get good thinking and application. They tend to be fragmentary memory. After learning some knowledge fragments in class, they forget after class, and when they get to the next class, they can't connect the new knowledge points. As a result, they seem to have learned a lot of knowledge, but they can't start with the comprehensive homework. They are mechanically applied, lack of creativity and flexibility Can be very good use of knowledge to solve practical problems, the future social development does not play a very good role. The reasons are as follows:

2.1 Students are generally confused about their future and career. They haven't made a good plan for four years in University. They don't know what they like and what they can do in the future. Most students think that their entrance examination is so hard to enter the University, in the university is to enjoy their youth, relax well, is a passive and lazy attitude towards the curriculum, think that adhere to the class, pass the course assessment, do not actively think about how to lay a solid professional foundation, use the knowledge learned to solve practical problems.

2.2 JavaScript programming should not only learn the theoretical knowledge of program design, but also pay attention to the use of theoretical knowledge to practice practical design, so as to combine theory with practice. Although many students have computers, they usually do not make good use of computers for learning. They do not prepare before class and review after class, which leads to low efficiency in class. When teachers explain the key and difficult points, students begin to read the textbooks. They have no way to participate in classroom thinking and interaction. They can't keep up with the old teachers' explanation. The efficiency of computer-based practice is not high, and the final learning effect is greatly reduced. At present, many students lack basic logical thinking and practical ability to solve practical problems, and their programming ability is weak.

Classroom teaching is the main channel for students to acquire knowledge. As a computer teacher, we realize that it is necessary to reform the teaching of JavaScript programming. We should focus on the physical and mental development of students to carry out classroom teaching, so that the charm of the classroom, so that students can truly become the master of the classroom.

3. THOUGHTS AND METHODS OF TEACHING REFORM OF JAVASCRIPT PROGRAMMING COURSE

Through the above analysis, we understand the current situation of students' learning, and according to the characteristics of JavaScript programming course, the combination of the two can teach this course well. Next, combined with the actual situation of our school, talk about the teaching reform ideas and methods of JavaScript programming course.

3.1. Project Driven Teaching to Enhance Students' Practical Ability of Programming

According to the professional training objectives of Computer College of application-oriented universities, the students' practical programming ability is a professional quality and ability of college students. For the students majoring in computer science, students should be required to master the systematic method of compiling computer programs. Project based teaching method can be adopted. Through the teaching arrangement of the project, teachers can better grasp the understanding and thinking rules of knowledge, deduce and analyze practical problems step by step, find out the internal rules, and enlighten teaching can be carried out when explaining. In the process of cultivating students' interest in programming, through some

small games that can make students interested, such as "monkey chooses king" or practical "web calculator" and "form generator" as teaching cases, it can guide students to analyze and solve problems, fully mobilize their enthusiasm in programming learning, and gradually let students have interest in learning Through the theoretical knowledge learned to solve practical problems, let students adapt to the project to complete the problem, exercise students' ability to analyze and solve problems independently.

3.2. Make Full Use of Modern Educational Technology and Enrich Teaching Means and Methods

With the continuous development of modern education technology, teaching means and teaching methods are more and more The characteristics of JavaScript programming course, we gradually from the traditional single classroom teaching mode to the "learning centered" mixed teaching mode, build a network teaching platform, enrich the teaching materials on the platform, form a closed learning loop before, during and after class, extend classroom learning, enhance students' interest in learning, and enhance students' practical ability.
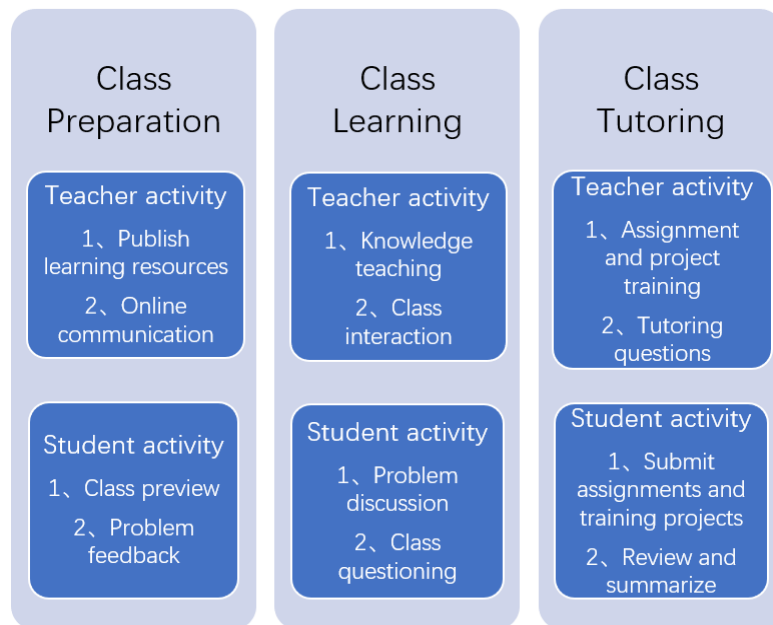

Figure 1. Mixed teaching model chart

3.2.1 Class Preparation

Before class every week, the teacher will release online learning resources in advance, such as the excellent online course video and courseware corresponding to this week's content, so that students can watch the course video before class, and preview the courseware according to the courseware, which is no longer a dry textbook. Through the preview before class, students can have a preliminary understanding of the teaching content in the classroom, and can feed back the difficult content through the class group. Through students' learning feedback, teachers can better explain and interact with the key and difficult points of the course, design classroom teaching, integrate into the project, teaching can better explain in simple terms, and greatly improve the teaching effect of the classroom.

3.2.2 Class Learning

In the classroom teaching, according to the preview feedback of students, design and improve the whole teaching link, including introduction, learning objectives, pre test, participatory learning, post test, summary and classroom questions and answers, etc. The teacher can explain the teaching content vividly and explain the key and difficult points, fully embody the learning

centered teaching mode, let students actively participate in classroom interaction, improve students' classroom experience, and make students learn more efficiently in the classroom.

3.2.3 Class Tutoring

According to the students' classroom learning situation, teachers teach students in accordance with their aptitude, arrange homework exercises after class, and complete projects in groups, combining theoretical knowledge with practical ability. At the same time, through the random questioning survey of class group, the degree of goal achievement is checked, the classroom teaching is expanded from time and space, and the interaction between teachers and students is enhanced. Students in homework exercises or projects encountered in the problem, can be through the class group contact teachers to answer questions, better stimulate students' interest in learning.

3.3. Process based Curriculum Evaluation Fully Affirms the Growth of Students

According to the characteristics of JavaScript programming course, this paper adopts the method of process course evaluation to assess the students and test the teaching effect. It pays attention to the students' learning process, cultivates students' good learning attitude and fully affirms their growth. In the course evaluation, the teacher will evaluate every link in the learning process of students.
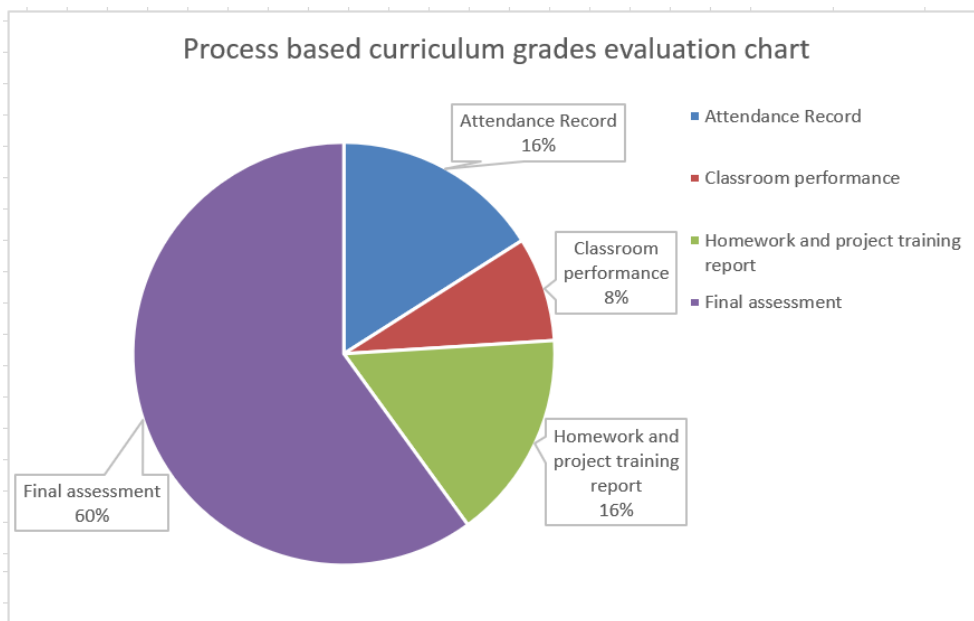

Figure 2. Process based curriculum grades evaluation chart

3.3.1 Attendance Record: Teachers insist on attendance every time in class, assess students' attendance and students' classroom performance, strictly require students to attend class, not to be absent from class without reason, and take certain points deduction punishment for public leave, sick leave, personal leave, absenteeism, tardiness and early leave. It is mainly to restrict students, and the most important thing is to come to class. This is the most important step in success, which must be strictly controlled.

3.3.2 Classroom performance: The scoring standard of this module is based on the attitude of students in class, such as whether students actively participate in interactive answering questions, whether they are very serious in class practice, whether they find problems in the process of practice and seek solutions in time. Teachers encourage students to practice in class by way of homework, and let students actively participate in classroom learning, which greatly improves the efficiency of classroom.

3.3.3 Homework and project training report: This module is the homework and assessment project that students need to realize after class, which requires students to think independently, finish the homework on time, the project training report should be correct, clear and complete, the program design code should be complete and correct, and the operation results should be correct. In the process of implementation, teachers can have their own innovation or opinions. Teachers can evaluate students through the above aspects.

3.3.4 Final assessment: The module is a comprehensive assessment. Teachers can take "computer test" or "written test" to carry out the assessment at the end of the semester, and evaluate the students according to the detailed and standardized evaluation standards.

Each of the above evaluation modules accounts for a certain proportion of the total score, and the students' learning process accounts for about 60% of the total score. The teacher assesses the students' mastery of the course from a multi angle process, so that the students can successfully lay a solid programming foundation for the JavaScript programming course, and pave the way for the follow-up related professional courses. On the one hand, it is the understanding of JavaScript programming course knowledge, on the other hand, it is the flexible use of professional knowledge, which combines theoretical knowledge with practical ability to cultivate students' thinking ability and thinking habits.

4. CONCLUSION

To sum up, in the teaching process of JavaScript programming course in application-oriented universities, we should strengthen the reform and Reflection on the traditional teaching mode. Through scientific and reasonable project driven teaching, students' practical ability of programming is enhanced, and modern education technology is fully used to enrich teaching means and teaching methods. Through the scientific process course evaluation, fully affirm the growth of students, so that students can have a more in-depth study of the teaching content of JavaScript programming course, so as to improve the students' comprehensive practical ability.

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