Research on the Teaching Method of Computer Software Major Based on the Software Project Oriented

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Keywords: Software Project Oriented, Process Assessment, Software Major.

Abstract. Computer software is one of the major professional practice, the students majoring in computing professional practice ability is insufficient. The reason is that the basic course of computer science is not related to the practice, the students' professional practice time is short or the practice is not a professional course. Cause teachers and students do not attach importance to professional practice ability. In this paper, the author puts forward the teaching and examination of the software works as the guidance. At the same time, it puts forward the methods of teaching and assessment.

Introduction

At present, the computer software major courses are divided into two types of professional basic courses and practice courses. The former is mainly related to the professional basic theory knowledge. Furthermore the latter set up practice content based on the former theoretical courses. But this way in the process of learning the students lack of creativity and enthusiasm, even often passive learning.

On the other hand, teachers in the teaching process is more difficult to improve the level of professional knowledge. On the other hand, teachers in the teaching process is more difficult to improve the level of professional knowledge, special teachers to track the development of computer software, through the design of students to make common development of teachers and students.

Research on the Teaching Process of Students' Software Project

After entering school, students can learn about the contents and student’s software project cases of the major by means of a professional range of lectures and discussions. Students determine software project guidance teachers and preliminary selection of software works. Software project guides teachers to guide students to choose the basic course of the project based on selection, and complete the work of students in order to complete the graduation project.

Student Software Project Choice

After choose a major, student through professional lectures and discussions, to fully understand the professional knowledge of the professional will be to learn. This way has solved some of the students to learn professional doubts, fuzzy, for the students to establish professional goals have a guiding role. Students in the guidance of teachers to design professional work objectives, students play a leading role, teachers play a supporting role. Guide teacher to help students to determine the scope and difficulty of the work, so that the content of the project to select suitable for students. After selecting the topic, the teacher helps the students to choose the professional courses for the software project of the students.

Students learning professional courses in the process of professional courses teacher and software project guidance teacher, professional learning more comprehensive and in-depth. Both from the theoretical knowledge and practical point of view to guide students. Taking into account the
integrity of the computer software professional, in the course of choice there are some courses for the software project to add non direct related courses.

Take A students as an example, select the electronic commerce website software development. Software project related professional course selection Html and CSS, PHP program design, Mysql database development, JavaEE enterprise application development, Oracle enterprise database development, JavaScript and JQuery development, Android/IOS application development and computer network. Taking into account the complete and future development needs of the professional foundation of students. Add a series of extended courses, such as C programming language, Java program development, computer hardware basis, Linux server and so on. These courses are only related to professional courses, such as mathematics and other basic courses as each student must learn content.

After selecting the teacher according to the progress of the curriculum to guide students to complete each part of the software project, the student's learning objectives and teachers' guidance goal is more clear.

Student Software Project Process Assessment

Process assessment is very important after the student software project is determined. At the beginning of the software project, students' enthusiasm was the highest. But with the continuation of learning, students will be slack. The main reason is the development of computer software is a mental activity, students need to develop the idea of the program and software engineering. Some students find it difficult to understand, the fear of software development. Process assessment for students to learn to promote. At the same time, the software project guides teachers to discover the problems of students and to solve the difficulties faced by the students.

Process assessment is divided into two lines, the first line for students to take the course of the results, mainly by the curriculum teachers based on the class content of the learning situation. Scoring method can be the same as the traditional teaching method. Second lines for the development of software projects, the score is the focus of this research. The whole process is shown in Figure 1.

Get a score for each semester, pay attention to this score is only a semester total score. First of all, it is the enthusiasm of the software project development in the course of the semester. The reason is that the real software development process of enterprise attaches great importance to the attitude of employees. Therefore, the attitude of students is an important manifestation of professionalism. Secondly, each student's guidance teacher will set up the software project completion time node, each time node to grasp the knowledge of students, but also to promote students to learn professional knowledge. Students cannot be completed on time will not get a good result, this will promote the students to take the initiative to view the document or information and active students and teachers to discuss. Remember this point is also concerned about whether students complete the project according to the thought of software engineering. For example, whether the document is complete, the project code is the use of version management, project schedule time whether the strict management, etc. Of course, these are not completely completed by the students themselves. Students currently have no relevant experience, the project guide teachers to reflect the role of guiding students to help students complete the above content. The third is to complete the software project quality, the functional integrity of the score test students of software project, user interface and software code quality. The score with respect to the former two is weakened, the reason is that in the project process, in addition to the work of the students to complete the software project process to learn the real software development process and work skills.
The software project after each semester of software project development scores students generated grades, and credited to the student's total transcripts.

**Analysis on the Advantages of Students' Software Project**

(1) For students, the software project as a goal in the learning process is no longer blind learning. Especially for professional courses, students have the direction and purpose of the students professional courses and enthusiasm will be higher. Students graduated from the software development experience at the same time, increase the employment of chips.

(2) For teachers, to guide the students' ability of software project, it can also improve the professional level of teachers. Teachers in the guidance process can also be high grade student assistant to guide the lower grade students, teaching form more flexible.

(3) For the enterprise, the software project is an important basis for recruitment. To the actual project as the recruitment of students based on more targeted.

**Summary**

Taking students' software project as the guidance of the software professional teaching methods, effectively improve the students' learning interest. Students in the learning process prone to the problem is difficult to adhere, through software project as the main line to keep the student's excitement. Teachers improve students' ability through the course grade and software project process. Is also a means to improve teachers and students. Employee selection based on the quality of software project in the enterprise.

**Acknowledgement**

This research was financially supported by the National Science Foundation, the Jiangsu Province Department of Education Reform Project (No. 2015JSJG396) and The Jiangsu province university teachers as senior enterprise Engineer(No. 2015FG035).

**References**


