

Application of Project Teaching Method in Webpage Design and Making Course

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Abstract. Objective: Improve the teaching efficiency of webpage design and making course; Methods: By using project, reorganizing the contains of a class into several comprehensive projects and analyzing those projects, which is carried on gradually around sub-projects. Results: Level-upping students' practical skills, provoking the sense of project development, qualifying the comprehensive abilities of teachers; Conclusion: It's a beneficial attempt for higher educational institutes to revolutionize by combining practice and theory in teaching with the help of projects in this new situation.

Introduction

Webpage design and making course is wide-applied and practical. As a speciality of computer college in high education, it's aim is to train students' ability to design, make, plan and conserve the websites, and it emphasizes the importance of the combination of theory and practice. However, this course is taught almost by the method of telling a theory and training by practices, which is unable to expand the knowledge, therefore, the motivation for students to learn isn't enough. According to the Development Zone Theory, the current ability of students cannot live up to their potential states, which is best for their study [1]. To accommodate their characteristics, such as being instability, unapprehensive, meanwhile being fond of practicing and being active, in the teaching approaches, teachers should change the traditional ways of teaching, and try to arouse their interests of study and train them to practice better. Learning is for using, teachers should bring students up as professional people. This is the significance of bringing project teaching method into webpage design and making course as a vital practice of exploring the professional education revolution [2].

Project Teaching Method

Project teaching method is a teaching activity by which teacher and students conducting a same whole project together [3]. Teacher is a conductor, guide, organizer and supervisor, who separates a single project, explains knowledge points that used in every project, and makes students to analyze, collect information, make plan, settle it and then conduct it, communicate the result with others and make comments. Students are operators of the whole process [4]. The whole process of project teaching method is conducted around the project, it can raise students' abilities to be responsible, cooperative and problem-solving. Their professional skills of theory and practice can also be improved in the process of studying. Through guiding and supervising, teacher can improve his/her professional skills and quality [5].

The Differences and Connections between Project Teaching Method and Traditional Teaching

The Differences between Project Teaching Method and Traditional Teaching. In the aspect of teaching method: traditional teaching method regards class, teacher and textbook as the central part, pay their most attention to explain professional skills and knowledges. Students study passively. Students being lack of positive exploration, their creation and innovation are restricted; The project teaching method focus on students and projects, and in this method, teachers do their teaching in class, and guide students to have plenty of practices outside of class [6]. In the aspect of teaching theoretically and practically: traditional teaching methods emphasize the pass of knowledge, the theory is been overweighted, and the skills that they learned are not suitable to the real world; The project teaching method sees the development of abilities importantly, and it combines teaching theory and practice together, concentrating on the application of knowledge and skills [7]. In the aspect of assessment: students under the traditional teaching method are required to cram up to pass the exam; The project teaching method assesses students in 3 dimensions: teachers, groups, and cross-groups [8]. Therefore, by traditional teaching method, teachers have to supervise students to study all the time; By the project teaching method, motivating students, their study becomes effective with the projects.

The Connections between Project Teaching Method and Traditional Teaching. There are many connections between project teaching method and traditional teaching. During the teaching of webpage design and making, students will encounter many notions and concepts, marks, code, and so on, which can only be taught in traditional ways. That’s why we should combine the project teaching method and traditional teaching together in real teaching process. Only in this way can we motive students and keep them up, and students will be trained to develop their abilities to innovation and practice by exploring, finding positively and analyzing knowledges by themselves [9].

Curriculum Design and Implementation of Webpage Design and Making Course Based on the Project Teaching Method

Preparation of the Project Teaching Method. Teacher will divide them into 3-to-5-people study groups according to their hobbies and specialities, and then choose a leader in each group. Every two groups should accomplish similar projects as comparative groups. The leader of group will be responsible for discussions, accomplishments of projects, distribution of assignments, supervision of projects, and coordination of group members, making everyone do their own jobs meanwhile cooperate to discuss, only in this way can the project be accomplished successfully.

Implementation Process of the Project Teaching Method. The project teaching method can be divided into four steps just as showed in Figure 1.: project selection, project design, project implementation, and project reflection.

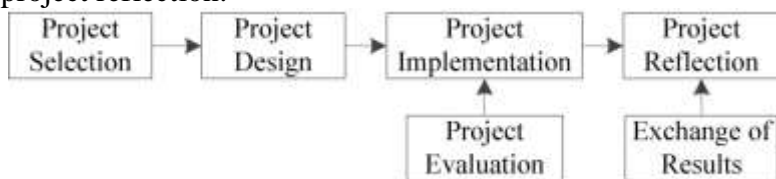


Figure 1. Implementation process of the project teaching method

Followed the specific procedures of design:

Project Selection. Teachers should refer to the contains and goals of this curriculum, webpage design and making course, and they should also consider the knowledge points in the textbook, Students are supposed to be given enough time and space for them to create and innovate. Furthermore, teachers should make this curriculum combined with real world closely, which requires each study group to learn the knowledge points well meanwhile practice them in real world, and make innovations

[10]. Teachers will guide students to choose websites about local tourism, local food and so on from the aspect of starting an enterprise; to choose websites about music, movie, and e-books from the aspect of interests; to carry on small websites for companies and other practical, applied projects in the aspect of companies, ensuring the perfect dock of curriculum and companies. After fixing projects, study tasks should be settled to help students clarify the goal and demand of studying and understand projects.

Project Design. Firstly, teachers are going to introduce, explain and demonstrate a completed project as example, to help students clarify the procedure of developing the project [11]. Then the project will be divided into several steps, and the knowledge points in each step should be listed and refined. At last, conduct the teaching according to module designing of the project [12].

Project Implementation. According to the design plan of projects, study groups are supposed to transfer their knowledge into use, complete tasks together positively and self-consciously, by looking up relative files, working together on a project but doing different things, and practicing while learning. In this step, for the existence of the difference of ability and habit in different students, several common problems will occur, such as, forgetting to add forms, only adding the elements of form, putting every form element into different forms, forgetting to set a variable, choose variables directly, and so on. Therefore, in the whole procedure, teachers should check the process of projects, and instruct students in trouble. When teaching them and answering their questions, however, what should be mind is to give them independent time to think and design by themselves.

Taking the study of Software Technologies Class, Grade 2015 as an example, and introducing the application of the project teaching method in webpage design and making course.

Table 1 Training plans of webpage design and making course

Num- bers	Contents	Activities	Demands	Time (H)	Exams methods
1	I . The fundamentals of webpage making II . The basic operation of webpage making III. HTML language	I . Teachers teach in class II . Teachers lead students professionally	I . Knowing the aim, methods, basic knowledges of this course II . Appreciating excellent works made by others	4	I . Exam in process (50%). Discipline, attitude of studying, ability, cooperation, attitude of working II . Exam in result (50%). Time consumption of each project, the perfect of functions, the art of webpages, and the ability to innovate.
2	Project selection	Students explain their ideas	The aim, style, function of the website	4	
3	Searching for source material	I . Students collect pictures, words, video sources II . Students report the result	I . The way of searching II . The source websites	4	
4	Project design	I . Teachers explain the design of homepage, subpages and contains. II . Students do and present it in groups	I . Designing pictures by Photoshop II . Cutting pictures by Fireworks III. Making movies by Flash IV . Designing pages by Dreamweaver	8	
5	Designing in details	I . Teachers explain the design of database and the technology of enter database in frontpage II . Students show their accomplishments for now	I . The design of database and data forms II . Special effect for movement and the use of Spry	36	
6	Releasing the website	Teachers explain the technology of releasing websites	Releasing website and access websites successfully	2	
7	Project reporting	I . Students present their projects II . Teachers evaluate their projects	I . Comments-making by teachers II . Comments-making in groups III. Comments-making cross groups	6	

Project Reflection. After students accomplishing the whole project by their own efforts, they and their teachers are required to introspect, summarize, correct and improve themselves by the project teaching method, and teacher should guide students to conclude from the aspect of designing ideas and skills, in order to make progress by learning from others [13]. Through the conclusion of designing ideas, students are able to understand the best way to think in order to accomplish a project, and they will also get to know their problems of design and the corresponding solutions, to make up for the theoretical instability. In this part, students will show different ways to get the same result, and then students and teachers will make comments about advantages and disadvantages of different methods together, learning from them and improve themselves positively in the study of professional studying [14].

The Meaning of the Project Teaching Method Applying in the Webpage Design and Making Course

Training the Professional Ability of Students. The whole project teaching method concentrates on real projects, in this teaching method, teachers and students interact with each other on the problem of designing a website. Students transfer their way of studying from passive to positive, and they innovate bravely, discuss with each other, increasing the participation largely [15]. In order to solve problems encountered in projects, students will learn from textbooks, understand the importance of knowledge, and their ability to problem-finding, problem-analyzing, and problem-solving. Students gain experience and knowledge in practice, and their horizons are broadened. This kind of teaching method, not only enables them to share more, but also motivates them to study harder, in this way, their professional abilities are improved further. Under the help of practice of the project teaching method in webpage design and making course, students are able to gain the knowledges about demanding, designing, making, achieving, testing and releasing, their professional skills are leveled up in practice, and they primarily gain the professional behaviors and abilities to become web-designers [16].

Training the Comprehensive Ability of Teachers. There're many ways of teaching in the project teaching method approach, teachers need to make and push micro-videos, micro-courses, which combine the mode of online and offline teaching together to help students to expend their knowledges. The project teaching method is a set of educational strategies, requiring high-level and profession teachers of teaching to carry on. Only when professional teachers carry on the project teaching method, can the students' creativity and innovation be motivated largely, can they study positively and accomplish projects with high quality. During the process of the project teaching method, students will ask random questions, which requires teachers to prepare for those in advance, and improve themselves. Teachers are supposed to study continuously, to enhance experiences of projects, and to strengthen the leading skills by the cooperation between schools and companies. Teachers' leading role must be played well by guiding, inspiring, and supervising. They should also be equipped with skills of using different knowledges comprehensively. Updating skills and specific knowledges is of vital importance for teacher to improve their qualities. In this way, teaching and studying can motive each other mutually [17].

Conclusion

It has been proved by practice that, when used in webpage design and making course, the project teaching method approaches can combine theoretical teaching and practical teaching effectively, which comes to a wonderful result. Students' skills have been improved, such as their motivation, innovation, practical skills, cooperative senses, problem-finding, problem-analyzing, problem-solving, sense of project development, and so on. What matters more is that their practical skills for working are trained

well, which meets the need of professional people who is innovative, practical, and be capable to set a new enterprise.

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