The Exploration of Practical Teaching Method

Taking "Building Constructive Technology" as an Example

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***Abstract*—This article has introduced the status of the course and the existing problems which are taking the example of 'Building Constructive Technology', and proposed the reform program to the course which is the practical teaching methods and measures. And we have obtained the good effects by taking this kind of teaching method.**

Keywords—construction technology; teaching; curriculum reform; measures

I. INTRODUCTION

The course of 'Building Constructive Technology' is an important professional course of architectural major, and it is an integrated course based on Drafting, Draft-reading, Material and some basic professional courses. And it is a synthetic application of every professional course which mainly researches the construction technology, the technical requirements, the quality requirement and the standard of the kinds of construction of constructional engineering. This course is a practical course which has extensive contents and involves many subjects. Therefore if teachers explain the knowledge just according to the theory of textbook, the teaching effect on students won't become ideal. It is of great importance for students to grasp the technology of construction whatever the graduates engage in the work of designing, construction, management or any other directions of professional jobs.

II. THE CURRENT SITUATION OF CONSTRUCTION TECHNOLOGY CURRICULUM

A. Teaching Materials are Outdated without Advanced Technology and Craft And are out of Touch With the Development of the Industry

Most teaching materials are using the teaching materials of many years ago without advanced technology and craft. And the old current national standard and specification are not modified which could mislead students. After graduating from school, students have to adapt to the new technology for a long time. Therefore, it requires teachers to give students more complements of advanced technology, advanced craft and new materials in order to turn the knowledge students have learned into more practical.

B. It is mainly teaching the theoretical knowledge at school instead of the practical knowledge

Construction technology is the summary of the knowledge and experience of being at the first construction site, because the textbooks are quite theoretical. Therefore, the students would learn the knowledge only by listening to teachers abstractly to memorize the relative theoretical knowledge. It is extremely difficult to memory the knowledge and apply them by combining the theory with practice. And this kind of teaching method is similar to being an armchair strategist. Therefore, the teaching effects would not become ideal if without memorizing the knowledge by practicing and applying the knowledge students learned to engineering projects.

III. THE MEASURES OF CURRICULUM REFORM

A. Combining with the Development of Advanced Construction Technology and Updating the Contents of Teaching Materials

Some technical contents in the teaching materials are outdated and some contents have been abandoned owing to the lagging of the contents of special teaching materials.Confronting with the rapid development of the construction industry and the a mount of advanced technologies pouring in,it is very necessary to add more new knowledge in teaching in order to enhance the capacity of adapting to the society for students.The teaching contents shall suit with the real specialist technology and that the construction technology involves a variety of procedures and techniques.For example, in recent years,the construction engineering industry,the high-rise building and the middle-rise-building occupied the majority of the building structure.On the contrary,the mount of masonry concentrate structural buildings are declining.Therefore,the difficulty and the key point should be transferred.And making the key complements to pile foundation engineering, concrete engineering, pumping concrete, large template, the slippery rise template, steel structure, exterior wall and roof insulation energy-saving, new type of waterproof materials technology,elevator and firefighting.

It is deepening and expanding the components of teaching materials when teaching the traditional technology and craft, in the mean time, adding the new materials,new standards,new codes,new conceptions,new policies and the

subject developing trends to teaching materials,in order to insure the advanced knowledge that students will learn.

B. Arranging the Building-Construction Technology Training Course

Building construction technology is a practical,complex and comprehensive course.Therefore,studying effects of students are not ideal if only teaching students the theoretical knowledge.It requires students combine the theoretical technology with practice. Plunge into practice. Attend to personally to master some skills to lay a solid foundation of engaging in the work of management.

Campus construction technology training:The component of training could set some basic courses,such as Masonry, Template, Concrete, Plaster, Condole top, etc.In addition,the difficult key courses such as:The design and making the model of reinforced concrete stairs,the blanking and the making of rebars of the columns, beams and board.Students could experience these crafts and methods by means of calculating,processing,making and installing by themselves,and master the gap between the theory and practical operation,and then the problems would be solved by themselves.Even though the students who are not good at the theoretical study,they could solve the theoretical problems by means of practicing.This method also reflects that the students are the main body what could enhance the practical capacity of students,and the students also have the high enthusiasm.

Off-campus internship arrangement:The construction technology of off-campus practice is an important part to learn this course.Courses and theory are complementary to each other.The traditional teaching method is the focus on theory, do not attach importance to practice.The content is outdated. Students rely on memory to master the construction process and ignore the initiative of field practice. Teaching theory for abstract content of complex technology and advanced technology, the classroom instruction is not detailed presentation.Combining the construction technology of every chapter content, practice of each subdivision work and major theoretical knowledge through off-campus internship to improve the students's interest and ability to solve practical problems.

The learning of students at the construction site is to learn more of current national construction standards and acceptance specification and learn the engineering drawings and Atlas.Learned in school is just a major theoretical basis and make them both closely through practice.Make students adapt to practical engineering quickly, giving the learning initiative to students,improving the students' interest in learning greatly, stimulating the students' learning desire and potential, learning effect is remarkable.

Making full use of modern teaching methods to improve teaching effect: due to the construction technology of practicality and it is difficult to explain thoroughly rely on traditional theory, much of the content is unable to indicate clearly, teaching should make full use of multimedia, pictures, model and other modern means of teaching, combined with engineering examples and explain the existing project cases from a practical point of view, the teaching effect will be better.

Assessment of courses: the traditional theory teaching is decomposed into two parts: the theoretical teaching and practical teaching. It requires that the assessment should reflect the effect of the students learn the knowledge.It should adopt the theory test and student's actual operation or an oral examination for a comprehensive evaluation.Practice in the course of the exam should be closely combined with the students' practice content. This can fully mobilize the enthusiasm of students learning and development diligent in thinking, and be good at innovation.

IV. CONCLUSION

Anyway, construction course teaching should be based on the theory of teaching and consolidate the theoretical knowledge learned in practical teaching,Teachers should arrange for the design and plan of the course carefully, strengthen the practice teaching management of both inside and outside school , fully mobilizing students' learning initiative and interest to solve problems in engineering practice.It can reflect the value of the knowledge and perfect combination of theory and practice,broadening the students' knowledge, enhancing students' awareness of quality, safety and management. It also provides a rare opportunity for the employment of students at the same time.

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