

## The thinking of practice teaching based on strengthening civil engineering management specialty

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**Abstract**-In order to train talented people which adapt new times in the civil engineering management, the paper discusses how to develop practical ability of major in the civil engineering management, which based on the training targets of civil engineering management of my University and quo status of course system, and information from internet investigation and field survey

**Keywords**-management courses; practice education ;practice base ;graduation design; the civil engineering management

### I. INTRODUCTION

on deepening education reform, advancing a quality education decision> has been issued in The state council of the communist party, which pointed out: 'higher education should attach importance to training students' creative ability, practice ability and creative ability', and it to be change the traditional concept of talent, it will present good atmosphere of using talent heavy quality and heavy practice ability. As is known to all, the practice teaching is important component parts and indispensable in the innovative talents training process, which is also the most important means of the student who understand the theoretical knowledge, form active learning spirit and exercise the comprehensive quality and ability, then it is important form to cultivate students' integrate theory with practice, improve the ideological and service level . Through the practice teaching, we can cultivate students' innovative ability, creative ability, research ability, practice ability and scientific spirit, attitude, behavior and habits. However, the practice teaching development is slow because of professional founded time is short and various factors in the civil engineering management professional , This article will Put forward some advices from the curriculum ,practice the construction of teachers' team, set up a practice base and graduation design

### II. REFORM MEASURES

#### A. optimize the curriculum system setting

I have been contacting graduate students and visiting engineering enterprise Since 2008, I found the phenomenon that the units of choose employ persons are generally accepted civil engineering graduates' engineering management knowledge is quite poor and superficial, they do not meet the engineering enterprise need to market competition, especially to the international competition of modern project management personnel requirements. Most

of the civil engineering management professional of undergraduate course graduation students' management ability is very poor. It is very lack of talents who know design, fine construction, understand management in the society now, this is largely explain that our civil engineering management professional training mode is not conforms to the demands of the era, and big defect is existed in practice course setting. At present our school project management professional training scheme is basically four kinds of the basis of professional course platform :technical, economic class, management class and legal class, then Pulsing professional course is to integrant curriculum system ,but the system structure of the platform course is not reasonable and comprehensive on setting principles, all kinds of curriculum and the proportion of scheduling arrangement , course content relative is lag, especially for practice in the course[1].

Training students' practical ability and professional ability is one of the distinctive features of engineering management major, but management ability training is not rely on a course of interpretation, which must be complete through the reasonable curriculum system. The cultivation of practice ability is not achieved by one course or a test. Students' ability training is to be achieved which should be through the cognition practice, course design, professional practice, graduation practice and so on several stages, and the several stages of the practice must be throughout the project management undergraduate teaching, which must be followed in logical relation from perceptual to rational, from point to surface and from the plane to the three-dimensional. So it must have a system arrangement, which should be comply with the practice of the inner logic itself, it is provided Pyramid type cultivation mode[2].

#### B. the practice teaching teachers team construction

Practice teachers are compared to leaders or locomotive, their practice quality is very important. In order to improve the teachers' practice education ability, we should actively create conditions and opportunities which can make teachers to front line of production, engineering unit and to a high level of all sorts of relevant academic conference; or the highly educated personnel and some teachers should be attractted to experiment technology series through the measures, and the high-level, a high level of teachers and engineering laboratory are introduced. At the same time, the school should be establish and improve a set of scientific evaluation and incentive mechanism

through the improved evaluation system, which can encourage the teachers with rich experience to the experimental teaching key positions, and can attract teacher who has the high academic level and the good teaching effect to put more manager into practice teaching, the incentive and mobilize the enthusiasm of the teachers' participation in the education practice are be the maximum transferred.

The key position will be established in the experimental teaching, we must fully affirmed the experimental teaching teachers' work performance and contribution, then improve the level of post allowance, So encourage high level of laboratory technicians steadfastly completes the labor of duty. We must give the full affirmation and priority to the teacher who made the outstanding achievements in the practice teaching in the teachers' professional technical position employment process,.

In addition, we can improve the practice education team structure by establishment of "practice education holds the teachers" system. Schools should employ employment who has rich experience in engineering practice and social practice of the engineer, the construction cost teacher and constructs the teacher of senior personnel by certain funds support, they are forming a highly efficient combined with practice education team as the beneficial supplement of the practice education team, then promote the construction of practice education team.

### *C. the construction of practice base*

If talent ability training has not professional laboratory and practice base construction of form a complete set, then ability training will be an armchair strategist, therefore, we must pay great attention to the construction of hardware facilities, we must to be establish the professional laboratory and practice base.

#### *(1) specialized laboratory construction*

The project cost and project management simulation can be realized by project management "digital lab" build, and we can train applied talents through the multimedia teaching, network information and network system teaching. For instance, we can establish "the second classroom" by imitate the legal professional curriculum concept, which can let the student to organize and participate in "simulation case", "simulation market" and "moot court", then the students' theoretical knowledge will be combining with practice as early as possible.

#### *(2) the practice base construction*

According to the requirements of teaching, we will establish a relatively close "cooperation" relationship with some enterprises. It not only can implement the practice teaching mode and help with management work in the internship, but also can be participation in professional teaching reform. The practice base provides a good conditions for students' project practice ability training in a certain extent, so that the students can combined perceptual knowledge and rational knowledge, and they can do the really case in the practice, so as it can improve and enrich the students' project practice ability.

But at present, the society can provide the practice of university education resource is limited, the practice of "going out" which is limited by base, funds and security problem, and enterprise's enthusiasm is not high to accept students practice, we only use of the limited resources to develop base.

We suggest that we can make full use of the "master of engineering", who usually are the enterprise leadership, they have certain social background. It is a relatively easy way to solve the base by sign practice contract for 3-5 years with their enterprise. Last year, my professional is successful signed some practice base contracts with several large and medium-sized enterprises in Shenzhen and Changsha, which effectively relieve the problem of internship units.

### *D. strengthen the quality control of graduation design*

Graduation design is the last practice in four years college students learning, which is also the important means that should be comprehensive test the students of four years the accumulation of knowledge, application and innovation. The purpose of graduation design is to train the student's the ability to analyze the question and solving practical problems, and train their ability to be engaged in the research work of the preliminary, then the professional engineer's basic training will be completed.

#### *(1)A. Strictly control the quality of the subject*

The graduation design topic is the leading work, the quality of graduation design topics is the important factors to the quality of graduation design, and it is the first step of graduation design to well carefully selected the graduation design topic[3]. Practice has proved that if all students has strong interest in from contact task start, and has clear goal and self-motivated, which is laid a good foundation for the high quality to complete graduation. Teacher should elaborate design your own graduation subject which has reached a new subject content, the all of knowledge structure, the full of work task, wide applications and high practical value.

#### *(2) Strict process control*

The implementation of quality control is improve to the quality assurance in the whole process of graduation design[4]. In the design process, the vice President of tube teaching is assumed leadership, the director of the teaching and research section is directly responsible for management. In order to ensure quality, we must implement the daily attendance, teachers take attendance students, and directly provide guidance, but also the director of the teaching and research section will take attendance guidance teachers and students. In order to ensure progress, the students should report complete the achievements and not reach requirement last week to teachers according to the specification and instruction of the plan on weekly, the students should leak and fill a vacancy and timely keep up with progress and this week's plan, teachers supervise and urge students to finish the design task according to the arrangement plan,

#### *(3) Strictly the graduation reply*

Reply is the end of a link in the graduation design

work, which is the an important means that to be comprehensive inspection and evaluation of the quality of graduation design. Strict defense will benefit students to establish good style of study and improve students to complete graduation design earnestly [5]. The school shall establish specialized graduation dissertation committee, who are divided into a number of reply team according to the different design topic, and the leader in the field of subject is reply team leader. Graduation reply can be adopted self-summary statement, taking random question answer questions and expert's questions. We must equally and stop human sentiment score in the graduation assessment for students.

### III. CONCLUSION

Training applied talents is the goal of the higher education personnel training. This paper are analyzed how to strengthen the civil engineering management specialty practice teaching by curriculum set and practice the construction of teachers' team, set up a practice base and graduation design ,etc,its purpose is to provide service to

develop engineering management talents. But we still must continue to work hard, it must be reformed from the teaching material construction, cultivating goal orientation and curriculum examination.

### ACKNOWLEDGEMENT

This work was supported by teaching reform project of Central South University of Forestry & Technology (2012)

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