

Research on Establishing Applied Personnel Training Model with the Guide of Professional Accreditation

——Taking the Major of Cost Engineering as an Example

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Abstract. Meeting industry needs must be taken as the entry point of the applied personnel training, then to build a training model in which undergraduate theoretical teaching is combined with industry practical ability. The accreditation in the charge of industry association or organization, bridges between higher education and industry market. It provides a recognized professional assessment of educational institutions or training models, and will furthermore promote the improvement and quality enhancement of these institutions and training models. Aiming at China current problems in undergraduate professional personnel training model, this paper takes the professional accreditation as the guarantee of improving applied personnel quality. Then it combines the growing trend of China cost engineering industry and concludes an applied personnel training model with the guide of professional accreditation, to enhance the competitiveness of graduates in job market, and meet the development demand of China cost engineering industry.

Keywords: applied personnel; training model; accreditation; cost engineering

1. Introduction

In recent years, in the Chinese mainland, training of application-oriented talents in certain disciplines shows a dilemma that the university talents output divorces from industry market demand, that is to say, a large proportion of college graduates are facing difficulties in employment, while many companies find it difficult to recruit talent needed[1]. Especially for universities with most undergraduates major in engineering cost, their graduates' basic theory and research capacity are inferior to those of first-class high-level university, and their practical ability are not equal to those of vocational colleges, this phenomenon is particularly prominent.

Based on the nature of education, higher education is required to not only meet the needs of economic and social development, but also meet different growth and development needs of all educates[2], in terms of applied personnel training mode of talents major in engineering cost, industry associations or agencies are responsible for the professional accreditation system, serving as a bridge connecting higher education and industry market, to provide a recognized, professional assessment for educational institution or training mode, and to promote continuous improvement and quality improvement of these institutions and training model. Practice has proved that the implementation of professional accreditation will guide institutions of higher learning to adjust teaching programs, teaching methods and direction of reform, to build applied training model, to promote school itself Construct an effective quality assurance system, strengthen the integration of teaching and industry, and promote universities and business contacts and cooperation.

Based on this, from the professional accreditation system itself, this article starts from the requirements for university professional education and capacity building standards, to build application talent training model with professional accreditation as a guide (Figure1), from theoretical basis, teaching objectives, operating procedures, achieving conditions, teaching evaluation five aspects, to comprehensively improve the training quality of engineering cost professional applied personnel.

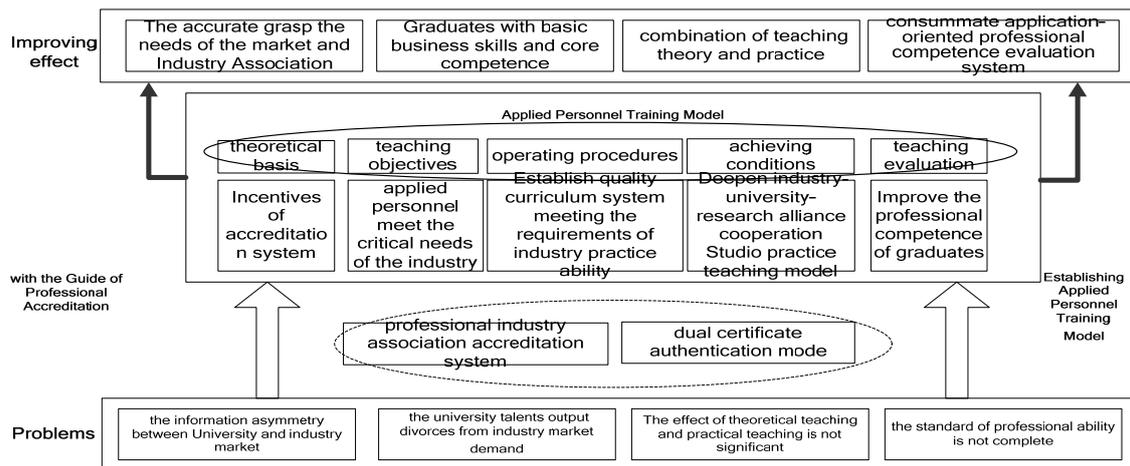


Figure 1 Application Talent Training Model with Professional Certification as a Guide

2. Development of professional accreditation system and its role in enhancing the quality of higher education

With the reform of China's higher education system, a variety of assessment models are introduced into China, Chinese scholars have conducted researches and discussions on this in order to provide certain theoretical support and reference for the development of Chinese professional accreditation system. International Encyclopedia of Higher Education points out that quality assurance mechanisms of higher education develops with the development of higher education. "Accreditation of higher education (institution or program)" has been the fourth mechanism following the emergence of licenciadocendi, "entrance examination", "external peer examination" three quality assurance mechanisms[3]. International Encyclopedia of Higher Education mentions "Accreditation is public affirmation of school, college, university or professional learning program curriculum has reached certain qualifications and educational standards given by a legitimate and responsible organization or association." American higher education accreditation system, with the most extensive research, gives China a lot of inspiration of higher education management system reform [4]. American higher education accreditation system is the result of combined effects of a variety of power within higher education and social environment[5], which adapts to the American higher education's popular and diversified development trends, improves and perfects the accreditation system, improves relations between accreditation and the public, enhances mutual cooperation between the accreditation bodies [6].

Study of literature and years of practice have proved that American higher education accreditation system has played roles of strengthening higher education academic value, strengthening institutional autonomy, by requiring institutions applying for accreditation or professional degree-granting authority and providing general education, the accreditation also provides a solid foundation for degree education and general education.

3. The theoretical basis for professional accreditation system to improve applied personnel training model

Engineering cost professional educational accreditation is a combination of teaching theory and practice, but also one of the main basis for determining higher education professional direction and curriculum. Colleges and universities' curriculum and teaching links are in close collaboration with professionals practicing ability requirements proposed by industry associations [7], which is an effective means to resolve the status of dislocation between professional competence of graduates and employers demands, the reason is that incentives of professional accreditation system itself for applied personnel training, are mainly reflected in the following two aspects.

First, the main motivation for college professional education to pass professional accreditation is taking professionals practicing ability requirements proposed by industry associations as the basis, to

adjust school student's curriculum and training model, so graduates obtain skills for entering the professional field to do professional work, taking this guarantee to improve the quality of education. Whether the purpose of university teaching can be achieved or not, on the one hand, determined by the school's own factors, depending on teachers level of teaching and effort of students , and so on; on the other hand, factors determined by the outside world, whether the government, industry market have invested a lot of manpower and resources, provided feedback to the university, and improve the standard of professional accreditation system, provide internship opportunities and practical guidance for college education.

Secondly, the purpose for college professional education passing professional accreditation is to improve the teaching level, at the same time improve the level of social acceptance for schools, through professional applied training, students obtain professional vocational qualification upon graduation, which form university implemented social support dynamics; government and the public, in the process of constantly promoting professional accreditation system, ease the pressure on the job market, and Construct a good social image, but also create favorable external environment for the implementation of professional accreditation system in terms of policy and the social environment; the industry market, as a direct beneficiary of professional education output, with a large number of applied personnel entering the job market, reduces the cost of enterprise staff training, improve the operational efficiency of enterprises, also by way of partnerships with colleges and universities to Construct a long-term contact, and so on.

4. Construction of applied personnel training model under professional accreditation system

(1)Applied personnel teaching objectives under the professional accreditation system

The key teaching goal of applied professional personnel training is to respond to and meet the critical needs of the industry required professional competence standards[8], teaching content, teaching methods and teaching assessment, all of these should start from personnel training output level to respond to industry market required professional ability standard. Learn from the experience of developed countries and regions, practitioners of applied professional personnel training industry should follow "basic competencies" and "core competencies" in Competence Standard System, Construct applied personnel training procedures, Construct appropriate implementation conditions.

(2)Applied personnel training procedures under professional accreditation system

Combined with the domestic professional competence standards and college course system correspondence, to for three practice ability-oriented curriculum system, and prepare the core curriculum materials corresponding to competency standards, so as to solve the problem that theoretical teaching content disjoint with ability requirement. In the engineering management field, different subjects in the current domestic market are increasingly inclined to requiring engineering management talents with the whole process, even the whole life-cycle management capabilities. Development of the industry requires students to master whole process management capacity on the basis of mastering basic skills. To this end, applied personnel training curriculum shall responds to the requirements of industry expertise, to further optimize the core curriculum, Construct a multi-level system of quality courses.

Learn from APC, Assessment of Professional Competence of the international Quantity Surveying Industry Association, before graduates internship and employment, teachers shall conduct inspection and assessment of their professional basic knowledge and practical ability, guide students in internships and graduate design stage direction, and the end result shall be a necessary condition for students to obtain undergraduate degrees.

Applied personnel training shall place emphasis on improving the overall quality of students, and therefore should take measures to supplement classroom teaching. First of all, take the results of APC testing as a guide, develop graduation thesis and graduation thesis mentoring program integrating theory with practice for students, make up for undergraduate study by thesis and paper writing. Second, we should encourage and organize college students to participate in industry skills competition, improve their learning ability, practical ability and teamwork skills. Finally, we should keep in close contact with the relevant international organizations and specialized agencies, organize

teachers and students to participate in international academic conference, so that teachers and students get better align with the international market, understand the latest industry developments abroad, absorb advanced ideas of foreign engineering cost industry leading figures, regularly organize extended academic lectures to strengthen international language training, send students abroad for short-term visiting, and accept counterparty students visiting, so that the academic communication level meets internationalization.

5. Conclusions

Construction of applied personnel training model is the core path to improve the level of personnel training and meet needs of industry development, while professional accreditation system, as a bridge connecting higher education and industry market, plays a guiding role for the construction of a variety of undergraduate professional standards. Through analysis of professional accreditation system, the direction of efforts for Chinese university applied undergraduate professional training model is recognized. For engineering cost undergraduate professional, take professional accreditation system requirements as guidance and direction of applied personnel training model, is a teaching model innovation based on combination of theory and practice, but also provides enlightenment for Chinese universities undergraduate engineering cost professional, and plays a key and indispensable role in business innovation, management innovation in industry market.

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