Investigation on the Importance and Construction of Double-qualification Teacher Team

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Abstract

Building double-qualification teacher team that can adapt to the requirements of undergraduate teaching is a key to cultivate applied talents with high quality, which is also the main direction of the undergraduate education teachers' team construction. Based on various references about two-qualification, definition, connotation and importance of the double-teacher are presented. At the same time, five methods to strengthen construction of double-qualification teacher team are proposed. The core is system construction. The focus is a complete set of funding support, treatment distribution, and work assessment and so on. What is more, it is necessary to set up the cooperation practice platform between school and enterprise, invite social intelligence resources and form routinely and stable construction mechanism.

Key words: Double-qualification; Applicationoriented Undergraduate Education; Importance; Construction of teachers' team

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INTRODUCTION

Current undergraduate education heavy theory and light practice, engineering science education has always been difficult to change, there is no "double qualification" teachers, especially a group of professional lead of the double-qualification teacher construction team. It's unthinkable that traditional undergraduate college transform to application type undergraduate college, teaching research and teaching reform is the basis and premise of above transformation, these work may not depend entirely on individual college leadership who knows the western education and new teaching idea, need to rely on General teachers, especially the professional construction lead, whether professional training revision and adjustment, or as a guide to the professional teaching after the implementation of the work, we are all dependent on them. Double- qualification teacher play a central, leading role in professional reform and construction. Excellent double-qualification teacher can timely insight into industry changes and be able to according to market changes, capture industry supply and demand information, adjust early professional training orientation to meet the market demand for talents ^[1]. Double-qualification teacher is a bridge to communicate social production practice and teaching reform, can make the teaching reform and professional settings more pertinence, practicability, effectiveness, really do have a definite object in view. The double-qualification teacher team construction could not accomplish in one move, is a long-term work with the school running process, how to strengthen the double-qualification team construction, the core is system construction, the focus is a complete set of funding support, treatment distribution, work assessment and so on. In addition, General and stable construction mechanism should be formed, it can appear effect after quite a long period.

1. THE MEANING AND REQUIREMENTS OF THE DOUBLE-QUALIFICATION TEACHER

The concept of the double-qualification teacher is first proposed in vocational education, three reasons to propose the concept are presented. The first is to strengthen the practical teaching links, the second is to make the theoretical teaching and practical teaching correcting localization, organic combination, and the third is to adapt to the idea of taking ability training as the goal. But there is no common understanding about the definition of the double-qualification teacher. Some scholars had summarized various different of awareness and mentioned several different point of view: the double-certificate namely teacher certificate + vocational certificate; the double-title namely lecturer + engineer; the quality-said namely theory + practice; The theory of the whole believes that should construct the double-qualification teacher team from the point of the whole teachers team construction^[2].

Double-qualification teacher is refer to those professional teachers who have good ethics, teaching and scientific research ability, higher theoretical level, good industry professional attitudes, knowledge, skills and actual operational capacity, therefore doublequalification teacher should possess the following ability, such as a solid foundation of theoretical knowledge. higher teaching level and certain scientific research ability, and practical experience and application ability combining with the profession, double-qualification teacher have not only generous of basic industry theory knowledge and practice capacity, but also the capacity of integrating the industry professional knowledge and practical abilities in teaching process^[3-4]. Visibly, doublecertificate does not mean double-qualification teachers, double-qualification teacher is not a simple sum of teachers and engineers, but both organic integration in terms of knowledge, ability and attitude.

To this end, the double-qualification teacher should also have the following requirements in addition to basic teaching skills and good moral quality:

1.1 Solid Theoretical Basis

The double-qualification teacher qualifications of applied undergraduate university should achieve a PhD, at least graduate level, which is the difference of the double-qualification teacher in undergraduate university and traditional higher vocational college in theoretical requirements, which is determined by the basic requirements of undergraduate teaching, the standard cannot be reduced. The theoretical teaching of higher vocational college regard adequate as principle and focus on technical ability training, so the technology development and innovation capacity have a certain restrictions. And applied university on its basic characteristics, must have generous theoretical knowledge and take the knowledge basis for future personal development needs into consideration, and capacity and methods for further learning theory, while technical principle and application of technical capacity is not only know what and know why, more importantly is to have a certain technical comprehensive use and development innovation ability.

Secondly, the double-qualification teacher have the ability of linking theory with practice and using theory to guide practice, can link their theoretical knowledge with industry practice experience, use theory to guide practice, thus at the theory and the practice level, students can not only know what, also can know why. This is the fundamental demand of undergraduate teaching to strengthen theory, stress the application and use the theory to instruct practice. While the traditional higher vocational double-qualification teacher tend to emphasize skill development, relatively weak theory and theory to guide practice requirements, and tend to emphasize the simple operation skills in actual teaching. A qualified undergraduate double-qualification teacher should be good at linking theory with practice, reforming the original teaching content and teaching method, developing teaching and curriculum and cultivate the students' theoretical study ability and practice ability.^[5].

1.2 Extensive Industry Experience and Ability

Applied undergraduate universities at the time of hiring teachers, require at least 3 years work experience in the industry, or the long-term technical cooperation with the enterprises, or regularly to visit enterprise, which is the double-qualification teacher prominent feature, the technical level of double-qualification teacher in applied undergraduate universities is higher than that in traditional higher vocational colleges, the former focuses on product or project design and management technology, while the latter focuses on production operation or construction technology.

1.3 Strong Market Tracking Ability

Undergraduate teaching emphasize innovation spirit and practice ability, and to cultivate students' innovative spirit, teachers would like to have a strong spirit of innovation. How to train teachers' spirit of innovation, the key is that teachers would get out of school, go deep in social enterprises, experience the practice in the industry. Practice is the source of creative inspiration. Only in this way will be able to continue to keep up with the pace of technology development, rich creative inspiration and promote the cultivation of talents.

1.4 High Professional Quality

Over a relatively long period, graduates will become the backbone of most businesses in China, their technical competence and ethical standards has a decisive impact on enterprise development, so in addition to the technical business skills, college especially the undergraduate university should pay attention to students' ideological and moral quality education. The teachers of undergraduate university should have lofty ideological and moral quality and occupational ethics, it's also necessary to cultivate students' professional ethics in the industry and cultivate a backbone team of excellent business and excellent thought for the enterprise.

2. THE DOUBLE-QUALIFICATION TEACHER ABOUT THE IMPORTANCE OF TRAINING TECHNOLOGY APPLICATION TALENTS

Goal of application-oriented undergraduate education and social needs, determine that the application-oriented undergraduate education must cultivate composite applied talents, and to achieve this goal you must give full play to the double-qualification teacher role. How to adapt to the talents training mode and training objective of applied undergraduate university, the construction of doublequalification teacher team is one of the urgent issues to be addressed at this stage. No first- class double-qualification teacher team, applied undergraduate education in teaching reform, classroom teaching, practical teaching, recruit students, employment, and infrastructure construction, etc, become like water without a source. Therefore only give full play the double-qualification teacher role do really grasp the starting point and leading of the applied undergraduate education^[6].

2.1 Improvement of Classroom Teaching Quality Needs Double-qualification Teacher

The double-qualification teacher can adapt to the market actual situation, take advantage of their own theory and practice. Based on the typical technical case analysis, project discussion, and program design and so on, enable students to apply theory to practice, enhance students' analytical ability, thinking skills and creativity, conducive to the development of students' personality and creativity.

2.2 Practical Teaching Requires Doublequalification Teacher

Practical teaching link of all stages in a scientific setting is one of the key to cultivate advanced applied talents, the setting of the experiment project and training project on the cultivation of students' practical skills and problemsolving skills are critical. Double-qualification teacher are clear about the common technical problems and treatment methods in actual production because they have strong practical ability and strong hands-on fun. So in the process of cultivating practice ability and comprehensive ability, they can design the best experiment project which is conducive to the cultivation of students' practice ability and innovation consciousness, can also to the greatest extent take advantage of advanced teaching experiment and training facilities and site, implement two-way interactive interest teaching, improve students' operation ability and comprehensive application ability.

2.3 Improvement of the Employability of Students Needs Double-qualification Teacher

Application undergraduate university is used to serve the local or industry, which orientation determines on social economic development and the college's actuality. Its goal is to cultivate technical applied talents for the region and provide applied research achievements and community service, the applied undergraduate university regards application as essence and soul. Due to the double-qualification teacher often go deep into social and participate in production practice, so they can comparatively understand the social and industry talent situation, talent needs and the students wishes; In turn, the society and industry also know the school status, the professional set and teaching level and so on by the double-qualification teacher. Double-qualification teacher can become the link and bridge between market and school; excellent double-qualification teacher have a certain reputation and influence in community, they can become one of the ways established between students and social employment demand relationship.

3 DOUBLE-QUALIFICATION TEACHERS

With the development of China's higher education from elite to popular education, which will require higher education to a wide range of talents training mode of development mode, multiple levels, and the goal of application-type regular University is a research. production and management of application-oriented talents, so its double-qualification teachers are urgent issues to be addressed at this stage of construction ^[1] .The construction of Double qualification teachers team is impossible to overnight. It is with running process of a items long-term and throughout of work. There are five methods for how to strengthen the construction of double qualification team. The core is system construction. The focus is a complete set of funding support, treatment distribution, and work assessment and so on. What is more, it is necessary to set up the cooperation practice platform between school and enterprise, invite social intelligence resources and form routinely and stable construction mechanism. Authors should begin with three-building.

3.1 Clear School Double-qualification Team Building Goal and Incentive System

Double-qualification team focuses on the construction of a professional teaching force. Double-qualification talent should not be less than 60% in a professional teaching force. For existing theories of teachers to achieve this goal will be a very long process, premise must step towards except affecting the normal teaching work.

Double-qualification teachers' training and management regulations need to be formulated. Schools teaching management and reform should tend to promote the construction of school double-qualification teacher team and raise the teachers' ability to practice as an important part of the teaching work to support it. School reform is a serious topic, which requires rigorous academic attitude and sense of responsibility. Disciplinebuilding should be based on local economic and social development in the overall strategy of positioning and the demand on the basis of enterprise development, which need to deepen the reform of education, optimize teaching contents and curriculum structure, infiltrate practices education and promote the comprehensive promotion of quality education. You can take into account the following aspects:(1)double-qualification teacher recognition criteria;(2) the establishment of double-qualification teachers double title evaluation and engagement mechanisms;(3) double qualification teachers' performance evaluation system, including technology development and scientific research work, Experimental and practice training course development work, instruct students to science and technology, and so on. To introduce related offers, and incentive policy mobilization for arousing teachers' enthusiasm, double qualification teachers as teachers in the of a special groups, in terms of promotions titles, and promotions work, and remuneration, and learning education, who should enjoy relative generous of treatment. To simulate dominant indicators which can reflect work performance, make teachers find corresponding of location in various evaluation and the treatment and maximum to mobilize and protect their enthusiasm. Establishment of doublequalification teachers allowance, give special policy to double-qualification teachers who on while assumed theory teaching and practice teaching task in terms of hours per allowance and post allowance. Establishment of double-qualification teachers distinguished teaching, give full play to double-qualification teachers' backbone of the lead role, making more teachers to double qualification teachers^[7].

3.2 Teachers' Training and Improvement

Not only to focus on the general teacher training and development, but also to focus on strengthening the introduction, cultivation of academic leaders. Academic leaders are those with high professional ethics and strong academic credentials, management ability, and in a certain subject have been at the forefront of creativity, outstanding academic standards of teaching and scientific research, and who are able to train young teachers of higher titles. Academic leaders are core and leader of the team of key disciplines in colleges and universities. They have lead by discipline construction and teaching, research and demonstration effect. At present, many of the characteristics of higher vocational colleges do not form, is the lack of a leader. You can do this by starting from the following four aspects:

3.2.1 Participation in Business Practice

Schools should combine their technical advantage, offer related business entities, such as companies or firms. Teachers participate in business practice through methods such as individual part-time, stake. It should encourage teachers to teach at the same time, participate in the industry's production practices and scientific research activities, participate in the development of new products, new technologies, new methods, exploitation and dissemination, keep close contact with industry contacts, go deep into business, industry and enterprise development, know industry developments and future directions.

Schools should encourage teachers to start their own high-tech small businesses. It can provide additional conditions, such as the concentration of venues, facilities, help obtaining administrative permits. Schools should encourage teachers to set up businesses, to participate in market competition according to their combined expertise and market. Teachers in the course of operating their own businesses will constantly improve their professional and technical capacity and technical ability. To improve teachers' teaching ability, relevance and adaptability to improve teaching, there are a lot of benefits.

3.2.2 Carried by Scientific Research, Training Teachers

Scientific research is an important part of the school so that school teachers should be encouraged to actively report and participate in research projects. Through teachers' participation in scientific research and technical services, to combine theory and practice to improve double-qualification teachers' quality, improve teachers' ability of scientific research and innovation. This would enhance scientific research strength, expand influence and promote the teaching reform, enrich teaching contents, improve the quality of teaching. In addition, the teachers should also be encouraged to participate in local identification, demonstration of research projects and scientific research work, such as project planning, reporting, promoting the development of local science and technology and economic construction, and make teachers' understanding of the situation of the local science and technology development, conducive to supplement and improve the teaching content.

3.2.3 The Practice of Cooperation between Schools and Enterprises to Build Platforms

School-enterprise cooperation refers to schools and businesses in the form of agreements defining the modalities for cooperation, in the agreement clearly sets out the respective rights and obligations. Schools assign professional teachers to the corresponding businesses, business units, production line to put on field practice, formulate attachment to the top post plans. Professional teachers are familiar with and master the operation of enterprise production, production technology, skills and accounting, auditing, business management, enabling teachers to take the latest issues in the field of the profession and the scientific and technological achievements into the classroom, and teach to their students. Teachers' understanding of production practice, directly involved in the engineering practice, participation in accident investigation, analysis, processing, technical advice and training, participation in research and other work, improve the professional skills of teachers, social work experience, also strengthen the relationship between schools and local, stabilize teaching practice base for schools. Enterprise is the best quality teachers classroom for double-qualification teachers, double-qualification teachers' training is inseparable from the enterprise.

3.2.4 Draw Extensively on Industry Information and Peer Experiences

Characteristics of double-qualification teachers are that they know industry knowledge, and have a wealth of practical experience. For improving teacher quality, broadening horizons, schools should plan to organize teachers out of school, study tours to advance Brothers College and industry enterprises and learn their experience. Schools should encourage teachers to attend academic meetings, expert forums, professional societies or associations, academic Exchange. It should organize a job suited to one's special training for teachers of teacher training in Al-Qaida training, organize teachers to go to study at home and abroad to improve and update the knowledge, support and encourage teachers to go at the local research and engineering construction and study training to the domestic and foreign application or technical university.

3.3 Perfecting the System of Appointing Teachers, Inviting School of Talents and Intellectual Resources

3.3.1 Application or Technology-oriented Universities Recruiting Full-time Teachers at Home and Abroad

Outside the school, the introduction of the doublequalification teachers, such as open recruitment has a doctoral degree, at least 5 Years of professional work experience professionals. People live in, on the new teacher education as far as possible in place, school education on demand training to avoid the phenomenon. With the establishment of market economy system in China and continuous improvement, society as a whole had also formed in the larger environment of talent flow, community-oriented teacher recruitment in both theory and practice are feasible. Each school can attempt to formulate the specific requirements for the university, to the open recruitment^[2].

3.3.2 From Social Enterprises to Extensively Employ Part-time Teachers

There should introduce experts and engineering technicians actively those have rich practice experience and teaching capacity from related enterprises, and institution, and focus University to work as part-time teachers. While, Spot part-time teachers should play "pass, and help, and with" role through exchange and cooperation, realize training theory and practice of the organic link, benign interactive of knowledge and skills, promote existing teachers to improve professional level and hands-on capacity and promote overall optimization of the quality of the teaching staff.

At the same time, there should hire experts as visiting professor in the community, employ those have doublequalification professional technicians and management personnel from Brothers College as a part-time teacher and hire professional and technical personnel to teach or teach to the school on a regular basis. They pass or advanced professional knowledge of science and technology and make the students can accept the doublequalification education with their own work practice and research and development projects.

Incentives, hiring executives from the two participating schools and the teaching are important elements of OEI. For college students, and their mental development goes through two "classes", one of which is the school, and the other is social. One major deficiency of the education system in China is now both "class" independently of each other to split into two pieces. How to address the adverse effects of this? Double-qualification teaching staff is important aspect, and attracting executives has direct involvement in the school teaching effect. They enable students to receive two "classroom" best people to education, because they are the bridges of social demand-led universities, and often is the origins of the establishment and expansion of cooperation between schools and enterprises. From community to introduce part-time teachers, other than for certain subsidies in their economic and emotional incentives and spiritual incentives should be strengthened to mobilize, maintain the enthusiasm of the high-level talents. Their undergraduate, graduate tutor can be hired, enhancing pride [8].

There should be planned into the domestic and international expert on teacher training and exchanges, so as to raise the level of teachers' teaching as a whole. Also from related enterprises to introduce the engineering and technical personnel with rich experience in engineering practice enrich full-time teachers.

CONCLUSION

Above, the double-qualification teachers' construction of undergraduate teaching in teacher training is a new topic. It not only requires double-qualification teachers possessing teaching basic skills and good of thought moral quality, also having solid theory theoretical basis, rich industry employees experience and capacity, strong market tracking capacity and strong career literacy and many other requirements. Building double-qualification teacher team which can meet needs of higher education development would produce remarkable result for improving classroom teaching quality, carrying out practice sexual teaching and decreasing students' employment competitiveness. However, the construction of double-qualification teachers team impossible overnight, it need to system construction for core, focus on funding support, and treatment distribution and work assessment, related measures comprehensive supporting, form general and stable construction mechanism, know that the construction of double-qualification teachers team can decide school fate, and prevent construction of team becoming cosmetic show, then after a certain period. It will be able to show positive effects. For the essence of double-qualification teachers, how to manage or make double-qualification teachers function effectively has yet to be further in-depth study and research in the future.

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