

Discussion on quality assurance of practical training teaching in higher vocational colleges

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Keywords: Higher Vocational Education; Personnel Training; practical teaching quality

Abstract: With the rapid development of higher vocational education in China, the teaching quality of Higher Vocational Education has been paid more and more attention. Practical Teaching, as the characteristic of higher vocational education, is not only the way to improve students' vocational skills, but also an effective means to cultivate students' good professional ethics and quality. The management of practical teaching process and the supervision of practical teaching quality are the important guarantee to promote the continuous improvement of practical teaching quality in higher vocational colleges.

1. Introduction

Since the reform and opening up, China has carried out the national policy of opening the door to introducing advanced science and technology, modern technology is constantly innovating, the continuous emergence of new technology and new equipment, is the technical means of our production enterprises are also changing. Then to our front-line operators, technical jobs have higher requirements. Our front-line technical staff need to change some previous technical means, need to constantly innovate and research and development, and need to change because of time and place, which requires us as the goal of cultivating highly skilled talents of higher vocational colleges to reform and innovation. Our country is a manufacturing power, but it is not yet a manufacturing power. We need to further develop and expand China, transform China from a manufacturing power to a creative power, and make China truly become a world-class manufacturing power. The development of advanced technical personnel is the indispensable core factor. The ranks of highly skilled personnel among craftsmen in major countries is an important foundation for Chinese manufacturing and creativity, and an important force for high-quality economic development. If the state vigorously develops skilled education, trains skilled personnel on a large scale, and accelerates the training of high-quality workers and skilled workers, we should strengthen the construction of the training, use, evaluation and incentive mechanism of skilled personnel. The cultivation of higher vocational education in China is the production, construction, service and management, we need high quality skilled personnel, on the basis of the requirements and, in accordance with the higher vocational colleges "skills, quality first, all-round development" talent training tenet, vigorously promote work-integrated study, cultivate students' practical ability, reform of talent training mode, has been clear about the training teaching guidelines and policies.

1. The current situation of practical training and teaching in higher vocational colleges

1.1 Practical training conditions in higher vocational education in China

First of all, in some higher vocational colleges in China, the proportion of practical training and teaching is relatively small, and the curriculum setting and content are relatively simple. The hardware foundation of practical training in the school is relatively weak, the outdated equipment cannot keep up with the technical requirements and development rhythm of the development of modern enterprises, the number of practical training equipment is insufficient, and the utilization rate of some training rooms or laboratories is not high, which cannot meet enough operation and training opportunities for students. Secondly, there is no software in the practical training and teaching management, and many higher vocational colleges have not developed a set of comprehensive practical training management system, perhaps because the system needs a lot of data support and the idea of the construction of practical training majors in the early stage^[1]. Management is lack of system and an effective mechanism, the practical training teaching link depends on the responsibility and experience of practical training instructors. Some links of practical training teaching are useless, so such practical training teaching is difficult to guarantee.

1.2 The establishment of practical training and teaching assessment and professional skills assessment system is not sound

Some higher vocational colleges have not really implemented the assessment methods of practical training teaching, and the strength of the skill assessment reform that students should master after the practice and training is not enough, and the ability is not reflected through the practical training teaching. Some teachers are still using the teaching plans and assessment ability standards of many years ago as the basis for assessment. Such assessment makes students to understand the importance of professional skills, lack the pressure of professional skills assessment and the motivation to work hard^[2]. According to the previous technical requirements and assessment methods, students will not be able to master the modern development technology and mode, and the lagging technology after entering the society will be out of touch with the technology and level of modern development. Cannot quickly adapt to the requirements and rhythm of the post. More cannot make students turn the professional technology learned in school into the productivity of enterprises^[3].

1.3 The structure of the training teachers is unreasonable

There are problems in the layout of training instructors or training room administrators in higher vocational colleges^[4]. First of all, there are some unreasonable positions and positions of such groups in higher vocational colleges. Training instructors are as professional and technical personnel, while training administrators are as managers^[5]. The knowledge structure of the training teachers is unreasonable, the professional knowledge is old, the construction of the training teachers is not enough, the continuing education of teachers and the opportunities to exercise in the enterprises are not enough^[6]. Practical ability and the channels for absorbing new technologies and new knowledge are narrow, so it is difficult to undertake the task of cultivating a large number of highly skilled personnel^[7]. Another is that the proportion of double-qualified teachers of training teachers is relatively small. Teachers in the practical training series are subject to dual management in their organizational relationship. First, the management of the secondary college should also accept the management of the business leadership department^[8]. In the development of the work sometimes to avoid the important matters, shirk each other. This leads to the omission of teaching

and management in the work focus and the work center^[9].

2. Problems existing in the practical training and teaching of higher vocational education

2.1 Backward practical training equipment

The teaching equipment that affects students' hands-on ability is the basis of practical training and teaching^[11]. Due to the development of modern science and technology, the equipment renewal cycle is accelerated. In particular, some public schools, due to the limitation of funds, have a certain number of years for the purchase and use of equipment, the update is very slow, its teaching equipment often lags behind the production equipment of enterprises, the direct consequence is that students can not master the most advanced technology, cannot meet the requirements of enterprises for talents. In addition, before the purchase of equipment, the bidding documents of the president or the president can discuss them for many times, and it is too complicated to run these documents, procedures and approval procedures in the early stage. Some colleges in the hardware of the equipment, some majors are still using more than a decade ago, the equipment, in fact, this equipment has long been upgraded. There are also some software machine room, has been still in use many years ago version, I do not know the upgrade of these software is quite fast^[9]. On the other hand, the internship of students has little to do with the vital interests of the enterprise, and sometimes they even have to bear certain responsibilities and risks, so the intention of enterprises to accept the internship is not high. Although students want to go to front-line enterprises and units for internship, the main body of the whole relationship is the relationship between the school and the enterprise, while students as the main role of the internship work have been marginalized, and students are not in an active position^[12]. In this internship environment, although the school has spent a lot of manpower, material resources and financial resources, the effect and expected goals of students' internship are still much different. In addition, there are also some unmatched links in the win-win cooperation mode between the school and enterprises^[10].

2.2 The teaching staff remains weak

In some places, the teaching staff is relatively weak, the number of teachers is obviously insufficient, resulting in the unreasonable ratio; although some higher vocational colleges have introduced a large number of young teachers, which makes the title structure and age structure prominent; due to the shortage of teachers, the shortage of teachers, the practical ability is insufficient, the skills of cultivating students' practical ability are not so strong. Actually higher vocational colleges and ordinary colleges and universities of higher learning in the teachers this consideration is inconsistent, higher vocational colleges corresponding need more experienced double teachers, but some higher vocational colleges in imitating the introduction of college policy, introduced a lot of high degree graduate, PhD, from the development of the research direction of the talent is for the college of scientific research, project work has made a lot of achievements, but in terms of practical teaching, these high-level talents may not reach the technician level of the teacher's ability. Because this is the different place in higher vocational colleges, also can be called characteristic. The input of theoretical culture may not need too high level, but more in order to cultivate students who can work online and master a technology immediately after graduation.

3. The importance of practical training and teaching in higher vocational education

Firstly, vocational teaching can deepen students' understanding of concepts and knowledge. Although the teaching process is specified according to the teaching plan or teaching schedule, it

still needs to follow a cognitive law from sensibility to rationality, from practice to theory. In addition to the necessary material equipment conditions, teachers are a key factor, every teacher should know the importance of teaching, to constantly improve their own training teaching level. The teaching level of practical training includes the teacher's understanding of the teaching content, the teacher's training technical level and the teacher's arrangement, guidance, analysis, summary and assessment of the students' training content, etc^[13].

3.1 Rich practical training and teaching courses can stimulate students' interest in learning

A rich high-quality practical training teaching course can stimulate students' desire for knowledge and professional technology, and can form a relatively lasting and stable learning attitude and atmosphere. In building engineering surveying the practice course, for example, the basic specialized course, covers many students in engineering, such as architectural engineering, water conservancy engineering, municipal engineering, electrical engineering college, etc., the course from the level to the back of the theodolite measurement to the station measurement, finally to wire observation, control measurement, digital figure practice, etc. More than 80% of the content of this specialized course is conducted outdoors, and the proportion of theory courses is relatively small, which requires the training instructors to coordinate and arrange the outdoor training courses and theory courses in accordance with the teaching standards, and should not attach importance to theory than practical training, nor to practical training than theory^[15]. From the beginning of the course, the teacher's basic introduction of the measuring instrument, and then to the practical training teaching task arranged by the teacher in each class, we can slightly increase the practical training link according to the students' interest in this professional technical course. Or conduct a practical training ability test or competition at the end of each chapter. In this way, students can constantly stimulate their interest in this professional course, and also increase their practical operation ability. Students to learn this professional course will have greater confidence.

3.2 The development of practical training courses can temper students' will

Professional training courses must maintain a rigorous attitude and tireless spirit to carry out. The setting and completion of some practical training courses is not so simple, which cannot be done well in once or two operations, and some even need a long time of training and continuous attempts of other methods to achieve the desired effect. We can also use equipment in different survey training projects such as engineering surveying, engineering surveying, construction engineering surveying, hydraulic engineering surveying, landscape engineering surveying, road engineering surveying, etc. The operation of some equipment requires a long time in outdoor training to achieve the teacher's assessment and the required training effect, such as the use of electronic level in the secondary level training. Students need outdoor control points; Time, accuracy and error must meet the requirements. For another example, in the training of total station wire measurement, students have to practice in groups. Each group should hold the whole station weighing several pounds to build the station. Whether it is cold and heat, students have to conduct repeated learning and training outdoors. Only in this way can they complete the important professional training requirements. This is virtually in the training of the students 'will, exercise the students' calm mind and rigorous attitude towards science and technology^[16].

4. How to improve the quality of practical training in higher vocational colleges and ensure the application of students in the industry

Higher vocational colleges must first ensure the practical training teaching resources, and fully

consider the practical training teaching links in the teaching resources budget, such as the purchase of instruments and equipment, the development and upgrade of the comprehensive practical training management system, the guarantee and control of the quality of practical training and other management systems, which need to be considered comprehensively and carefully. It is necessary to use the practical training teaching resources reasonably through these means and methods. Ensure the effective operation of all aspects of training and teaching quality management [17]. Specific measures are as follows.

4.1 Adjustment and optimization of the ratio of teachers

Practical training instructors and practical training education managers should put forward requirements for their majors, educational background, professional title, teaching age, and in-post internship experience of enterprises, and need to establish and improve a series of personnel systems of employment, training, employment and promotion. The proportion of double-qualified teachers and the proportion of full-time and part-time teachers were adjusted. We will strengthen the construction of teachers and support existing in-the-job training. Only in this way can teachers' professional knowledge be enriched, their vision be expanded, and the design and implementation of practical teaching be better promoted. The school uses good policies to attract outstanding engineers from enterprises and frontline companies to serve as part-time teachers of mtcsol. These teachers have worked in enterprises for a long time, have systematic professional theoretical knowledge and rich practical experience, and are very familiar with the needs of society for a major. Their arrival can greatly improve students' enthusiasm for learning. Facilitate the training of teaching courses, increase the practical ability of students^[18].

4.2 Strengthen the construction of practical training materials

The implementation of training must be supported and guaranteed by supporting teaching materials, which should emphasize applicability and pertinence, have sufficient scale of theory, organize and compile teaching materials according to the requirements of comprehensive technical application ability, integrate knowledge into actual development projects, and compile teaching materials that can reflect the characteristics of actual work and actual operation. The use of teaching materials should be constantly updated, and the distance between technology and enterprise production should be maintained^[14].

4.3 Strengthen the pilot and development of modern apprenticeship system in higher vocational colleges

Modern apprenticeship is a project proposed by the Ministry of Education of the Ministry of the People's Republic of China in 2014, which aims to deepen the integration of industry and education and school-enterprise cooperation, further improve the education mechanism of school-enterprise cooperation, and innovate the training mode of technical and technical personnel^[19]. Modern apprenticeship Through the deep cooperation between schools and enterprises, the modern talent training mode of teachers focus on skill training for students, generally using the talent training mode of order class and named class. Modern apprenticeship pays more attention to the inheritance of skills. Modern apprenticeship is conducive to enabling students to master professional technology and practical operation at university. It is an effective way to deepen the integration of industry and education, school-enterprise cooperation, and promote the combination of work and study and the integration of knowledge and practice. Moreover, it is a seamless connection between practical training teaching and major. Cultivate students' sense of social responsibility, innovative

spirit and practical ability. We will comprehensively improve the training ability and level of technical and technical personnel.

4.4 Be society-oriented and cultivate talents needed by enterprises

With the faster and faster development of economy, the division of labor of certain types in society is becoming more and more specific and detailed, the needs of employers are constantly changing, and the requirements for talents are constantly growing. When we set up practical training links, we should divide practical training projects into several corresponding plates, and make appropriate adjustments on the theme of practical training skills. We should pay attention to the development trend and trend of society and enterprise, bring the latest technology to practical training, what kind of talents the company needs, we will try our best to teach our students, so that students will go to work soon after graduation, and maximize their knowledge and practical ability^[20].

4.5 Benefits should be taken into account in the practical training link

Higher vocational education to carry out teaching fusion, the principle of work-integrated study, we before training teaching will take students to some of the corresponding enterprises and a line to view, put some technical parameters, and technical equipment, through such training, can exercise the students' learning ability, but also can produce certain economic benefits, enterprises can hire some excellent students in the holiday to the enterprise to field practice, students can directly into the actual training project, can also create certain economic benefits. To meet the needs of enterprises for short-term practical talents. After the enterprise model training, students can directly take up the post, which will greatly shorten the so-called transition period.

4.6 Increase industry certification

The appraisal of vocational skills can be carried out in higher vocational colleges, which is the need of higher vocational education to actively adapt to the needs of economic development and labor and employment access system. In the practical training link, students can organize students to take the unified examination of vocational skills appraisal, such as the eight senior staff examinations in the construction industry, so that students can obtain the professional qualification certificate issued by the industry during the school period, which can enhance the employment competitiveness of graduates. The implementation of the double certificate system in the practical training is the main direction that the teaching reform of higher vocational colleges must adhere to for a long time.

5. Conclusion

This paper makes a series of analysis and research on the problems and importance of teaching quality assurance as well as measures to improve the quality of practical teaching. Higher vocational colleges are an important habitat for training skilled talents. With the rapid development of China's socialist market economy, all walks of life are increasingly in need of applied and skilled talents with comprehensive majors and comprehensive qualities graduated from higher vocational colleges. In order to shoulder the arduous task of cultivating such talents, higher vocational colleges must pay attention to the link of practical training and teaching, find problems, and actively do a good job in the reform and construction of practical training and teaching.

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