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Analysis of Vocational Engineering Labor Education based on Vocational Core Competence

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Abstract: Labor education is an important part of China's education system, which directly determines the labor ability, labor spirit, labor habits and labor quality of the next generation of workers in China. It is an important content of vocational education teaching reform to integrate labor education into the curriculum system of higher vocational colleges. this paper analyzes the puzzles encountered in the labor education of higher vocational engineering, expounds the importance of the labor education of higher vocational engineering to the cultivation of vocational core competence. And explore ways of vocational engineering labor education based on vocational core competencies from aspects such as labor education content and labor education system.

Keywords: Labor Education; Higher Vocational Engineering; Vocational Core Competence.

1. Introduction

As China's economy enters a recession, the employment situation is becoming increasingly severe, and employment difficulties for vocational college students have become a common phenomenon. The improvement of industrial production automation has to some extent reduced the demand for frontline technical workers in enterprises, and has also caused employment difficulties for vocational engineering students. With the increasingly refined division of labor in technology, the learning time required for each position's skills from unfamiliar to proficient is becoming shorter, and the dependence on technology is becoming lower. The importance of professional core competencies is becoming increasingly prominent. In other words, the high-quality talents that enterprises need are those with core professional abilities. The focus of vocational labor education should focus on cultivating students' core professional abilities, endowing them with the labor concept of creating people themselves, emphasizing the cultivation of a professional spirit of love for each profession, as well as a hardworking, united and cooperative, rigorous and meticulous work attitude.

At present, labor education in various vocational colleges is in the exploratory stage and has encountered various problems to some extent, especially in the labor education of vocational engineering departments. There is a phenomenon of labor education for the sake of labor education, and labor education and vocational education are not well integrated. Some schools offer separate "professional labor education courses", such as typing practice labor for computer majors and electronic welding labor for electronics majors. Little does it know that these labor skills are the basic labor skills that students in this major should possess, and are already included in many professional practical courses. It remains to be discussed whether it is necessary to separately list them as part of the content of labor education courses. What we need to study more is how to integrate the connotation of labor education into professional practical courses and activities. Through a scientific and reasonable labor education and training system related to the profession, we can carry out labor education, so that students can acquire core professional abilities related to the industry and meet the high requirements for social talents in the new era of development [1].

2. Reasonably Constructing the Labor Education System of Vocational Engineering

Society and enterprises not only require vocational college students to possess professional knowledge, but also require vocational college students to have the core professional abilities to adapt to their positions. Labor education for vocational college students is the core means of cultivating vocational core abilities. Therefore, it is necessary to use the internal and external environment of the school to construct a reasonable labor education system for vocational engineering.

2.1. Constructing Theoretical Labor Education in Higher Vocational Engineering

Vocational colleges offer no less than 6 hours of theoretical courses on labor education in their freshman year, guided by their professional direction and highlighting industry characteristics. Through special lectures, keynote speeches, and other forms, new media is reasonably utilized as a medium to provide education on industry labor systems, labor safety, labor taboos, and labor norms. Educate students with industry model worker stories and model worker spirit. Excavate the deeds of ordinary workers in school enterprise cooperative enterprises, let teachers and students Close encounter model worker, listen to their stories, and observe their exquisite skills. If engineers can teach on site in the industry, the effect will be better. Through preaching based labor education, students are convinced that every profession is glorious, and every position is worthy of respect. It cultivates a spirit of craftsmanship that is not afraid of hardship, constantly explores, strives for excellence, and pursues excellence, as well as a loving and dedicated work attitude.

2.2. Constructing Integrated Labor Education in Vocational Engineering

There are many professional practical courses in vocational engineering, such as experimental courses and practical training courses, which involve professional practical activities such as experiments and practical training. There are also many practical activities closely related to enterprises, such as enterprise job recognition when new to this major, on-the-job internship when approaching graduation, etc. Some majors have off campus training bases for productive internships. While teaching professional labor knowledge and skills, teachers should reasonably integrate labor education content to enable students to understand, understand, and experience the industry's labor environment, labor standards, and labor safety, thereby deepening their understanding of the value of industry labor. By relying on various experimental training courses and job recognition and placement activities, students can participate in real industry related labor, enhance their sense of professional identity and labor pride.

2.3. Constructing Service-Oriented Labor Education in Vocational Engineering

During the summer vacation of the second year of vocational education, most students have completed their professional courses. A labor education week of more than 10 hours is established, and various interest groups are set up according to the characteristics of their respective majors to cultivate a sense of professional honor and responsibility. Professional skills are used to carry out off campus public welfare service labor and professional related social labor, cultivate social ethics, and cultivate patriotism and love for the people. For example, in various fields of electronic information, home appliance maintenance groups, drone application groups, and smart home groups targeting community residents are launched. Vocational college students use their professional knowledge to provide teaching services for community residents. Robot groups, computer drawing groups, and electronic production groups for community children. Vocational students use their professional knowledge to provide teaching services for community children, while also opening the door to technology for underage children in the community. Schools that have done well in school enterprise cooperation should establish interest groups related to cooperative enterprises, such as machine tool maintenance groups, engineering construction groups, warehouse management groups, material testing groups, assembly groups, product packaging groups, etc. Students should use professional knowledge to serve the enterprise, try to engage in simple labor in a real professional environment, and also facilitate the selection of suitable talents from them.

3. Improving the Labor Education Ability of Vocational Engineering Teachers

We divide the three-year labor education in higher vocational education into cognitive professional labor, public service professional labor, and learning professional labor. Let's study the requirements for teachers at various stages of labor education.

3.1. Professional Teachers are Required to have a Deep Industry Background and Legal Knowledge

Cognitive professional labor is a teaching activity for the entire class, where teachers serve as a contact person for enterprises or, in the absence of enterprise teachers, explain the labor system, labor safety, labor taboos, as well as the stories and spirit of labor models in the industry. These require professional teachers to have deep industry knowledge, legal knowledge, and practical experience in enterprises. Or relying on the deep cooperation between schools and enterprises in this major, timely understanding of industry trends, understanding institutional reforms, keenly sensing the development prospects of the industry, and exploring how to vividly explain cognitive theoretical knowledge; Public welfare professional labor, students have entered society, and at this time, teachers play a remote control role, timely understand the situation of each group, provide appropriate suggestions when there are problems, and provide forward-looking guidance to students to avoid potential disputes and accidents.

3.2. Require Professional Teachers to have a Sense of Responsibility and Compassion

The most challenging aspect for teachers' teaching ability is learning oriented professional labor, which is integrated into normal experimental and practical courses. Firstly, teachers are required to have a correct worldview, outlook on life, values, and labor outlook. Teachers themselves need to be upright and persuasive in the teaching process. Secondly, teachers are required to have a sense of teaching responsibility, a pair of eyes for discovery, and timely detection of inappropriate behaviors in students' labor. Furthermore, it is necessary for teachers to have a compassionate attitude. Professional courses are taught for a long time, especially in practical training courses, which often involve training all day and all week. The previous student committed a certain type of labor problem, and then several students committed similar problems, but they are not typical and suitable for the whole class to raise them. This requires teachers to tirelessly carry out labor education for individuals and have a compassionate attitude.

3.3. Require Professional Teachers to have Innovative Awareness

A complete cognitive process is the process from practice to understanding and then to practice, which is the driving force of innovation. Innovative education is an education that can integrate into multiple educational platforms, forming an atmosphere where multiple parties work together to create innovative talents [2]. In the practical training process, some outstanding students combine theory and practice, and gain insights from existing practical activities to trigger new creativity. If teachers have a sense of “integration of work and creation”, they are good at guiding and discovering in practical teaching, timely grasping students' thinking sparks, encouraging and guiding students to innovate, and promoting students to turn their ideas into reality [3].

3.4. Require Professional Teachers to have Broad Professional Knowledge and a Spirit of Research

In the first year of higher vocational education, the explanation of enterprise engineers may not fit well with the professional background of students, and students may not understand. At this time, teachers need to timely explain and analyze according to needs, so that students suddenly understand, so that students can maintain their love for the industry. During the internship phase, students want to write a paper related to their internship position, but are unable to start. They urgently need the guidance of a professional teacher to understand the job process and its underlying theoretical knowledge, guide them on how to collect, organize, and document relevant Chinese and English materials, guide the use of professional software, inform them of the domestic and international development status of this process, as well as possible innovation directions, and so on. There are so many enterprises in the industry and there are millions of positions, requiring guidance from teachers who have broad professional knowledge and can handle various positions within the industry. Teachers need to have a spirit of research, and before guiding students, they should first thoroughly study the craftsmanship themselves. Even, teachers need to have a scientific research mindset, lead students to innovate together, apply for patents, and publish papers. Only teachers with good professional abilities can cultivate students with core professional abilities.

4. Conclusion

In short, vocational colleges achieve the effect of cultivating students' professional core competencies through various forms of labor education. We incorporate the connotation of labor and education on labor values into ideological and political courses and general education courses, and cultivate good habits of self-management and a love for life through campus life-oriented labor. In the cultivation of labor awareness and behavior in the industry, through the comprehensive use of lectures, bulletin boards, new media, and other forms, learn from the deeds of role models, the spirit of model workers, and the spirit of craftsmen. Through various experimental and practical training courses and job recognition activities, I have gained a profound understanding of the industry's labor environment, labor system, and labor safety laws. By expanding labor, enhancing team collaboration and serving society and enterprises. Labor education related to professional learning should gradually cultivate students' core professional abilities, gradually integrate them into the industry and society, and strive to become laborers in the new era.

References

[1] Cai Qing. Research on the Development of Labor Education for Vocational College Students from the Perspective of “Craftsman Spirit” [J]. Economist, 2022 (3): 162-163.

[2] Liu Yue, Ma Yan. The path to the integration and development of vocational labor education and innovation and entrepreneurship education [J]. Ship Vocational Education, 2022 (5): 22-24.

[3] Ye Bosen, Gao Fuying. Integration of Labor and Innovation: Construction and Practice of a Creative Labor Ability Cultivation Model for College Students Based on Innovation and Entrepreneurship Education [J]. Labor Education Review, 2022 (1): 36-47.

[4] Ma Jin. Play a Unique Role in Labor Education [N]. Gansu Daily, 2020-12-16 (010).