

Training Mode of Applied Talents in Engineering Majors for Higher Vocational Colleges

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Abstract. With the rapid development of China's economy and the continuous enhancement of comprehensive national strength, the manufacturing industry structure is constantly adjusted and upgraded. The development of enterprises needs a large number of high-quality grassroots front-line workers. The cultivation of high-quality applied talents is very important in engineering majors in higher vocational colleges. In this paper, the research background is introduced, the research idea is described, the definition of applied talents is explained, the training mode of applied talents is classified, the characteristics of engineering majors in higher vocational colleges are analyzed, and the training mode of applied talents is studied. Finally, it is pointed out that applied talents should pay attention to both theoretical basis and practical skills in the training of engineering majors in higher vocational colleges. Higher vocational colleges need to cultivate professional talents with basic practical skills and high quality skills.

Introduction

At present, with the rapid development of China's economy and the enhancement of comprehensive national strength, the industrial structure is constantly adjusted and upgraded. The development of public institutions needs a large number of high-quality grassroots front-line workers. It is very important to train high quality applied talents in higher vocational education [1]. According to the national higher vocational education policy and the market demand of engineering majors, the training target of engineering higher vocational colleges includes solid professional basic knowledge, basic practical operation skills and high-quality skilled professionals. In the talent training of engineering majors in higher vocational colleges, we should not only deepen the reform of talent training mode in higher vocational colleges, but also insist on the integration of production and education, school-enterprise cooperation and the combination of work and study. In the cultivation of applied skilled talents, students' skill training needs to be strengthened, and their vocational ability needs to be constantly improved [2]. The in-depth development of school-enterprise cooperation in higher vocational colleges should be supported by various aspects.

School-enterprise cooperation is a cooperative mode established by school and enterprise. School-enterprise cooperation is one of the important ways to cultivate application-oriented talents. The training objective of higher vocational education determines that the training process needs the direct participation of enterprises in order to be close to the actual needs of the talent market. The advantages of school-enterprise cooperation talent training model are many. School-enterprise cooperation helps schools and enterprises to complement each other's advantages, and school-enterprise cooperation can realize mutual benefit and win-win between schools and enterprises [3]. For enterprises, school-enterprise cooperation can make enterprises have a good social image, and school-enterprise cooperation can introduce new knowledge and technology to enhance the competitiveness of enterprises. School-enterprise cooperation can strengthen the cooperation between universities and enterprises to form resource sharing. Enterprises can absorb outstanding students through practical links. The school provides students with off-campus practice space and on-campus training base, through which students can exercise their hands-on ability and social adaptability. Students can transfer the theoretical knowledge learned in school into practical application ability and valuable work experience in the internship unit. Students can keep abreast of the latest information of industrial enterprises to improve their employment competitiveness.

Definition of Application-Oriented Talents

Applied talents refer to specialized talents who can apply their professional knowledge and skills to their professional social practice. Application-oriented talents are skilled in mastering the basic knowledge and basic skills of social production or social activities. Applied talents are mainly technical or professional talents engaged in front-line production. The concrete connotation of applied talents is developing with the development of the history of higher education. Application ability refers to the ability to transform and integrate the theoretical knowledge and skills learned in a specific situation and complete certain tasks [4]. This kind of ability is based on the actual production at the grassroots level. In the process of talent training, it especially emphasizes the mastery and flexible use of basic theoretical knowledge and pays attention to practical skills. In school, these skills are generally passed

Characteristics of Talent Training Mode

Higher vocational personnel training mode is a kind of education mode. The training mode of higher vocational talents is a variety of training activities and operation mode to realize the goal of talent training under the guidance of certain educational ideology. The training mode of higher vocational talents embodies the concept and understanding of higher vocational education. The goal of higher vocational personnel training mode is mainly to train production, service and management applied talents for the grassroots frontline according to the needs of social and economic development. The training mode of applied talents in higher vocational colleges involves school education, teaching and management. The training mode of applied talents in higher vocational colleges attaches importance to practical skills training in and out of school [5]. All these characteristics determine the particularity of the training mode of school-enterprise cooperation in higher vocational colleges.

The knowledge structure of application-oriented talents is designed around the actual needs of front-line production. Basic, mature and applicable knowledge is especially emphasized in the course setting, textbook construction and other basic work links. The ability system of application-oriented talents also takes the actual needs of front-line production as the core goal. In the ability training, the proficiency and flexible application of basic knowledge are especially highlighted. The training process of applied talents emphasizes the combination with front-line production practice. The cultivation of applied talents pays more attention to practical teaching. Practical teaching links include experimental teaching, production practice, graduation practice and so on. Practical teaching link is usually regarded as an important teaching activity about students' realization of the combination of theory and practice.

Characteristics of Engineering Majors in Higher Vocational Colleges

Higher vocational colleges are mainly colleges at the junior college level in China. Higher vocational colleges are positioned to cultivate applied talents with higher skills. Also higher vocational colleges are for our country to train the basic level of skilled personnel about adapting to the needs of economic development. This kind of skilled talents have solid professional theoretical knowledge and strong practical operation ability. Higher vocational colleges should teach students to master the necessary theoretical and cultural knowledge [6-7]. Vocational colleges also need to exercise students' vocational skills. Higher vocational colleges should develop a reasonable talent cultivation plan according to the needs of employers so that graduates can quickly adapt to the needs of employers.

School-Enterprise Cooperation Training Mode

School-enterprise cooperation to improve the quality of graduates and solve the employment of students as the ultimate goal. The cultivation mode of school-enterprise cooperation originated from the United States. School-enterprise cooperation follows the needs of social and economic development in schools and enterprises under the leadership of the government [8]. At present, there are many school-enterprise cooperation modes adopted to train engineering students in higher vocational colleges, such as "2+1" cultivation mode combining work with study," school-enterprise co-construction of on-campus productive training base "cultivation mode," industry-university-research "cooperative mode and" order-ordering "cooperative cultivation mode.

"2+1" mode of combining work with study is widely applied to the talent training program of engineering majors in higher vocational colleges. This mode of combining work with study is mainly to train high-quality technical talents with strong practical ability and innovation ability. Such talents can meet the needs of socialist construction. This skilled person has a good sense of responsibility. This kind of skilled talents master basic theoretical knowledge, engineering knowledge, practical operation skills and higher professional quality. Higher vocational students in the first two years in the school to learn basic theoretical knowledge, the third year arranged by the school to enterprises for post internship to complete social practice. This mode directly affects the quality of talent training in engineering higher vocational colleges. This mode can stimulate the development potential of higher vocational colleges to develop high-quality teaching plans, improve the comprehensive quality of engineering students, and meet the needs of talents for the development of market economy.

Industry-university-research cooperation refers to enterprises, schools and research institutions in accordance with the needs of the market economy. The cooperation between industry, universities and research institutes has realized mutual cooperation in personnel training, scientific research and technological development. Industry-university-research cooperation model organically combines classroom knowledge-oriented school education with scientific research experiments [9]. The mode of industry-university-research cooperation takes enterprises as the research demand side and higher vocational colleges or research institutions as the supply side, and exchanges, cooperation and research activities are carried out on the basis of giving full play to their respective advantages. The scientific research needs of enterprises can be obtained through the establishment of projects or research results of higher vocational colleges, so that the scientific research of schools can meet various needs. The industry-university-research cooperation model not only brings benefits to enterprises, but also strives for more research funds for schools. The cooperation mode of industry-university-research finally improves the talent cultivation level and scientific research ability of the university.

Order-type talent training mode is a talent customized for higher vocational colleges according to the requirements of enterprises, starting from market demand and students' comprehensive employment ability. "Order-type" talent training

mode is that the enterprise issues talent training orders to the school according to its own employment standards, and the school and enterprise sign a training agreement to cooperate in the aspects of teachers, technology and so on. The cultivated graduates need to pass the comprehensive assessment of the enterprise and directly employ the talent cultivation mode of the contract enterprise after passing the examination [10]. "Order-type" talent training mode can cultivate the urgently needed skilled application talents for enterprises and reduce the cost of talent training to some extent. Its main purpose is to enable the order-class students to achieve the organic combination of knowledge and practical skills, and truly realize complementary advantages and resource sharing.

School-enterprise cooperation is an educational mechanism when higher vocational education is gradually established. School-enterprise cooperation can meet the goal of cultivating application-oriented talents together. School-enterprise cooperation is the direction of synchronous development of higher vocational education. School-enterprise cooperation is the foundation for colleges and universities to enhance their social service level. School-enterprise cooperation can integrate multiple institutions of education and industry with the help of corresponding organizational forms. School-enterprise cooperation can not only meet the development trend of the education industry, but also be the basic premise for colleges and universities to carry out practical training in education. School-enterprise cooperation is inseparable from certain social division of labor requirements, school-enterprise cooperation can achieve a high level of division of labor. Training applied skills talents through school-enterprise cooperation can not only realize the close relationship between higher vocational colleges and enterprises, but also promote the integration of education, society and production. School-enterprise cooperation is one of the channels from theory to practice.

Conclusion

Applied talents apply their professional knowledge and skills to their professional social practice. Applied talents can master the basic knowledge and basic skills of social production or social activities. Applied talents are mainly technical or professional talents engaged in front-line production. The development of enterprises needs a large number of high-quality grassroots front-line workers. The cultivation of high-quality applied talents is very important in engineering majors in higher vocational colleges. In this paper, the research background is introduced, the research idea is described, the definition of applied talents is explained, the training mode of applied talents is classified, the characteristics of engineering majors in higher vocational colleges are analyzed, and the training mode of applied talents is studied. Finally, it is pointed out that applied talents should pay attention to both theoretical basis and practical skills in the training of engineering majors in higher vocational colleges. Higher vocational colleges need to cultivate professional talents with basic practical skills and high quality skills.

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