

The Research on Talent Fosters Mode of Chemical Industry Professional for Cooperation between Colleges and Enterprise

Yueyun Yang ^a, Bei Liu ^b, Xiaoguang Wang ^{c,*}

College of Chemistry and Chemical Engineering, Zhoukou Normal University, Zhoukou Henan, 466001, China.

^ayueyuanyang@163.com, ^bbeiliu@163.com, ^cwangqinghua201@163.com

Abstract

The significance of reform and innovation on talent fosters mode of chemical industry professional for cooperation between colleges and enterprises was discussed, and the goal of it was put forward. By the analysis of the content of reform and innovation on talent fosters mode for cooperation between colleges and enterprises, the problems to be resolved were ascertained. In the end, the effectiveness of the reform and innovation were introduced.

Keywords

Cooperation Between Colleges And Enterprises; Talent Fosters; Reform And Innovation; Chemical Industry Professional.

1. Research significance and present situation analysis

"About deepening education reform, comprehensively promote quality education decision" points out: "higher education should attach importance to cultivate students' innovation ability, practice ability and entrepreneurial spirit", "higher education to implement quality education, to strengthen the unity, vigorously promote the institutions of higher learning and scientific research institutes and industry cooperation, encourage conditional of establishing science and technology enterprises, institutions of higher learning in institutions of higher learning to establish the research structure, institutions of higher learning to establish" practical bases in the enterprise. University-enterprise cooperation personnel training mode reform and innovation in accordance with the current economy, science and technology and the development law of education, is of higher schools fully implement the party's education policy, and to adapt to the social and economic development to prepare high qualified personnel with innovative spirit and practice ability of effective education mode, and higher education faces the society, serve the society, the important way to promote the development of social economy, so it is becoming a basic trend of higher education reform, so cultivating talents in the current university-enterprise cooperation more and more attention by people." [1]

Competition between enterprises is characterized by collectivization and internationalization, the essence of the competition is more and more shows for the competition of science and technology and talent competition, therefore, strengthen the cooperation of enterprises and colleges and universities, scientific research and technology development with combining fosters the talent, is the enterprise in the competition and the key to active status.

Colleges and universities for its own survival and development, must be geared to the needs of enterprises, and enterprise cooperation, strive for funding. One of the distinctive features of contemporary university, the diversification of the function, is liable for training talents, developing science and technology and the function of culture, and must be directly for the social service of a variety of activities; This requires colleges and universities should make full use of enterprise equipment, instrument and technology service for institutions of higher learning education, to cultivate innovative talents of comprehensive quality services. Training can master production technology, operation, and management of engineering and technical personnel. This is for its own survival and development of colleges and universities, strengthen the cooperation with enterprises, path of combining study of one of the factors. How to cultivate interdisciplinary talents meet the

diversified social needs, the best is to strengthen the training mode of university and enterprise close cooperation, the path of combining business school.

2. The content of reform and innovation

- (1) Actively cooperate with the enterprises, professional construction and curriculum system construction earnestly.
- (2) Establish a long-term stable internship and practical training.
- (3) Actively take enterprise technology research project, and in a timely manner to scientific research achievements into productivity, create benefits for the enterprise.
- (4) Make full use of the existing teaching resources, actively training various talents for the enterprise, the service for the enterprise.

3. Goals and plans to solve the key problems of reform

In Cultivate students' innovation ability, practice ability and entrepreneurial spirit, promote the colleges and universities and industry cooperation to meet the needs of social and economic development, improve the training high ability persons with innovative spirit and practice ability teaching system.

University-enterprise cooperation personnel training mode reform and innovation to solve the problem:

- (1) Improve the student active learning the enthusiasm;
- (2) Improve the comprehensive quality of students;
- (3) Improve the students' employment consciousness;
- (4) Improve teachers' scientific research ability and level;
- (5) In solving technical problems, the respect such as technical training benefit;
- (6) Establish a long-term stable practice and training base.

4. University-enterprise cooperation personnel training mode and implementation plan

4.1 Make the plan and enterprise cooperation

Colleges and universities use the advantage of cooperation with many chemical companies, make full use of enterprise talent advantage of the company. Within the enterprise hired several enterprise technical personnel with college backbone teachers college teaching steering committee. In the theory and practice of professional construction, curriculum, teaching and talent training meetings on a regular basis, listen to their views, to guide college teaching work. College teachers also often go to business research, according to the requirement of the society, the enterprise in ; different periods of talent to update the college talent training scheme.

4.2 Establish a long-term stable internship and practical training

In practice, practice base, understand technology, understand management, operation ability strong technical personnel for our practice guidance teachers, and school internship guide teachers to practice together, the guidance of the student to carry on the technical aspects of enterprise to guide teachers to the school or teaching for the students in the enterprise, they will give the company's latest products, latest technology, the latest enterprise management such as teach students, make students to enter society, to the forefront of the knowledge, broaden the students' professional knowledge.

4.3 Participate in enterprise technology research project and convert scientific research achievements into productive forces in a timely manner

Enterprise, the company every year, some scientific and technical research project, college according to their own scientific research ability and level, active connection, shoulder some of the scientific

research subject for research, on the one hand, to exercise the college teachers' scientific research ability, also for the enterprise to solve the technical problem at the same time, new product development and technical transformation for the enterprise, recycling of by-products, equipment modification and optimization have done a lot of work. Scientific research achievements into productivity, in time for enterprises to create the interests.

4.4 Use of teaching resources, training talents for the enterprise, the service for the enterprise

School has a large number of highly educated talents, every teacher has a certain experience in teaching, at the same time have a certain knowledge of production practice. College of the existing chemical industry base, organic chemistry, inorganic chemistry, analytical chemistry, physical chemistry and other basic chemical laboratory. Chemical training laboratory existing pipeline disassembling, heat exchanger, gas absorption, intermittent, continuous distillation, such as fluidized bed reactor unit process of large training equipment, can undertake chemical production practice, driving device, such as training before taking up their tasks.

5. Special features and innovation

University-enterprise cooperation personnel training mode breaks through the single education pattern in the past, the role in training innovative talents is very obvious.

(1) University-enterprise cooperation personnel training mode, through the way of classroom learning combined with practical work, to the actual demand and research projects for combining site, make a theoretical study of the organic combination of learning with practice;

(2) University-enterprise cooperation personnel training mode the talent cultivation process in schools and enterprises, namely, school and society under the coordination of two kinds of environment. University campus to create a good study environment for students, the classroom, laboratory provides conditions for students to learn the theoretical knowledge in all the subjects, the enterprises provide students with the practical teaching environment, students through learning and practice to learn social enterprises, into the society and gradually adapt to the social environment. This is very important for the cultivation of the students;

(3) University-enterprise cooperation personnel training mode will be closely combined with theoretical study and practical work, is raises the student has a profound basis of professional knowledge, and improve the students' practical ability and ideological and moral cultivation. University-enterprise cooperation personnel training mode to carry on comprehensive talent cultivation, not only from the school to cultivate the students' basic theory and professional knowledge, and by working in enterprises to participate in the post and participate in scientific research, engineering project, cultivate students' basic labor skills and hands-on ability, vocational training. Through contact with the production practice at the same time, the basic theory of the learned in school knowledge closely combined with social work practice, through contact with society, in the work practice exercise language communication, the ability of dealing with people, learning life, work, establish a good interpersonal relationship, cultivate the students' sentiment and ideological and moral cultivation.

Acknowledgments

The authors wish to thank the helpful comments and suggestions from my leaders and colleagues in college of chemistry and chemical engineering, zhoukou normal university. This work were supported by the Scientific Research Innovation Foundation for education teaching reform project of zhoukou normal university(Grant No. J2016030) and the Henan province education technology equipment and practice education research subject(Grant No. GZS369 and Grant No. GZS370) and the project grant from the Foundation for University Key Teacher by Zhoukou Normal University.

References

- [1] Xinglin Yang. The Study on practical Talents and the Fostering Models[J]. Heilongjiang Researches on Higher Education, 2007, (6):164-167.
- [2] Qiaohong Huo. Exploration and Practice of Talents Training Mode for School-Enterprise Cooperation in Higher Vocational Major of Tourism Management[J]. Zhuhai City Polytechnic college, 2010, 16 (4):11-17.
- [3] Chunyan Liu, Xuxia Lei, Guigong Cheng. Reform and Innovation on Talent Fosters Mode for Cooperation between Colleges and Enterprises[J]. Guangzhou Chemical Industry, 2011, 39 (10):180-181.
- [4] Zhiping Chen. Physical Education in Vocational Schools According to “School-Enterprise Cooperation” Mode, Journal of Jishou University (Natural Science Edition) [J]. 2010, 31(5):126-128.
- [5] Jiaojiao Xu, Jian Chen. The Effect of School-enterprise Cooperation on Professional Ability Training in Higher Vocational College Students[J].The Guide of Science & Education, 2011, 3:59-61.
- [6] Yong Yang. Views on the Development of High- quality Applied Talents in College- enterprise Cooperation[J]. Journal of Yuncheng University, 2011, 29 (2):58-61.
- [7] Mengtao Qiao, Kun Jiao, Lin Li. Study on Ways and Countermeasures of Expanding Employment Channels Based on Industrialization of Universities in Baoding[J]. Journal of Hebei Agricultural Sciences, 2010, 14 (9) : 152- 154.