

Exploration and Practical Analysis on the Training Mode of Excellent Program Talents for Safety Engineering Specialty

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Abstract: Advanced Skills Education and Training Program" as a significant progress in innovative construction projects, focuses on reforming the current professional training program, strengthening cooperation between schools and enterprises, as well as students' innovative practice links, and strengthening social and practical skills. Based on the problems existing in the current analysis and safety engineering education, the excellent planning process of safety engineering experts at various levels has been adopted, starting with engineering innovation, comprehensive research and analysis, statistical analysis, engineering practice, feedback and evaluation. It is a unique model with excellent technicians' practice training as the mainstream. It provides reference for the future education of different experts in colleges and universities, perfecting the student innovation system, innovation platform and talent training mode evaluation mechanism. Advocate the curriculum system. This article will explore this topic.

1. Introduction

Promoting China's engineering education to become a powerful country in engineering education and innovating the key measures needed by economic and social development. The aim is to cultivate a group of high-quality engineering and technical personnel with the ability to meet. In terms of production, we have a complete team of safety experts in every field. According to the feedback from the employer, the overall situation of the alumni is good, but the students' practical ability in the work lacks the skilled use of the engineering identification platform, and lacks the flexibility to solve the practical problems. The ability to adapt to practical use and innovation awareness remains to be resolved. Based on the needs of modern social development and the analysis of current theories, the author relies on comprehensive cases including stylistics, scientific research and education to comprehensively analyze the current safety culture expert training program and the actual situation of students. China's education demand characteristics, development level, education status and management status, reform and innovation of safety engineering professional education plan, improvement of school-enterprise joint training mechanism, practice education innovation, improvement of students' practical ability, safety engineering expert plan It covers all aspects of the excellent talent teaching plan, comprehensively enhances students' sense of innovation, inspires students' creative thinking, and helps students of safety engineering professionals to develop in all directions. The aim is to provide excellent engineers of different universities with the ability to develop talents for future education and training models. I hope to provide some reference experience for future education through the article.

2. Excellent Talents Education Program

Emphasis should be placed on the reform of curriculum structure and content system, extra-curricular education, strengthening practical links and cultivating students' innovative skills, which is in line with the goal of human resources development. Promote the content and modern concept of curriculum design, strengthen the training of safety engineering specialty, construct the scientific system of curriculum planning, actively absorb the practical experience of enterprises and the needs of enterprise talents, and design more reasonable curriculum content. Implementing the

curriculum system reform in the course of practice performance and leadership role to fully focus on career development goals to coordinate the relationship between prerequisites and follow-up courses [1].

Based on the combination of professional skill knowledge and practical operation experience, a professional curriculum system is constructed. General education curriculum module, specialized large-scale teaching module, major and minor curriculum module. The first step in the module setting of teaching course is to ensure that it can cover multi-dimensional content in an all-round way, with the professional module of basic theory as the main part and the practical case module as the auxiliary part, so as to realize the innovative teaching content design as the main teaching module. Then, combined with the students' actual learning situation, increase the case lectures of school-enterprise practice, and cooperate with relevant industries and companies to develop some core professional textbooks [2]. Optimize and upgrade the core curriculum and professional foundation through teaching content and methods, and also invite experienced teachers to conduct more professional teaching courses [3].

And various ways to form high-quality educational resources. The optimization and adjustment of curriculum mechanism need to be carried out in the following aspects: First, enrich the content structure of curriculum based on theoretical knowledge, so as to improve the quality of classroom teaching. Secondly, expand professional courses to explore, according to professional courses to establish professional basic courses and elective courses, in order to further expand students' knowledge. Third, establish an excellent core curriculum system to meet the needs of social enterprises, sum up practical experience, and provide more comprehensive professional courses to help students provide more leadership in future employment. Fourth, increase the practice classroom, improve the practice classroom throughout the teaching curriculum, the integration of experimental projects based on the curriculum group, the increase of comprehensive design experimental projects, the formation of relatively independent experimental courses, the strengthening of education and scientific research, and the strengthening of practical school development. The construction of cooperation projects with enterprises will explore the new situation of cooperation between industry, universities and research institutes [4].

3. Comprehensive Development Model of Theoretical Skills of School-Enterprise Linkage

In order to further enhance the training efficiency of training outstanding talents, it is necessary to maintain the principles of systematicness, innovation and diversity of safety engineering training curriculum system. A combination of protection innovations [5]. Focus on the establishment of a gradual and progressive practice model of “Cognition and Foundation – Experience and Synthesis – Research and Innovation”, with vertical and horizontal correlations from the first grade to the fourth grade, and three aspects of attention along the training objectives:

Deep cooperation between schools - developing knowledge of engineering and operational skills. Close cooperation between schools and companies will jointly build a community of interests, establish the basic goal of talent development, and achieve common education, joint training and mutually beneficial development. This should be emphasized. In the process of metalworking practice, it is necessary to ensure that students can play an important role in the practical operation of engineering practice. Develop positive engineering practice awareness and basic operational skills and learn how to [6].

At the same time, we should pay attention to training students' ability of engineering application technology. By optimizing and adjusting the course content, the internship and experiment are integrated into the company's engineering background, and more practical education platforms are built. Create a better practice environment for students, such as a practical engineering training center, so that students can deeply study design practice engineering applications and improve their ability to solve technical problems. Through the various situations demonstrated by the practice of the enterprise, the theoretical knowledge learned will be better integrated, and the students' knowledge utilization ability will be inspired to help the students to operate the experimental

equipment more skillfully [7].

Focus on training teachers'engineering teaching experience, but also to enhance students' innovative thinking ability, so as to ensure that students can smoothly integrate into the company's internal practice and learning, skillfully carry out enterprise engineering training and research and development of related projects, but also to build a strong team of teachers. On the one hand, during field training, teachers are assigned to cooperate with cooperation units or production companies. Teachers hire senior engineers of the company as internship instructors, organize practical teaching teams, and deepen the internship work of guiding students. Familiar with comprehensive engineering problem solving, practical thinking training and innovative ability issues [8].

In order to cultivate the engineering practice skills of safety engineering students, we will strengthen the joint training with the company in accordance with the principle of "cooperating with universities and companies, focusing on various forms and fields". We will establish a cultural model of gradual training, hierarchical progress and deep integration so that students can learn from practice, participate in posts, gradually practice, receive education, develop advantages, contribute and acquire. Remuneration. Company and social employers pay serious attention to graduates and provide open channels for part-time or job change for universities and companies, so that more business engineers can join the school. In education activities, true industry-university cooperation is not only a research partnership, but also an educational partnership [9].

4. Constructing Innovation Development Platform to Promote the Development of Students' Independent Innovation Ability

Making use of the platforms in various main fields and the main advantages of national demonstration laboratory training bases and scientific research institutes, we should break the limitations of traditional teaching practice, open up more practical platforms, update and upgrade experimental equipment, and make full use of experimental materials and scientific research achievements. Promote undergraduates to participate in the teacher research and development project, and also better participate in the research and development of experimental equipment, solve the contradiction between current practice and innovation, and make the talent education mechanism more scientific and reasonable. Through the following three methods, the role of the classroom and the second classroom will be exerted, students will be concerned, students' innovation will be promoted through various channels, and the overall quality of college students will be continuously improved [10].

Accept scientific research and training to support innovation and create new systems. The university has established a group of undergraduate research training professionals, hired experts to review and supervise scientific research projects, and organized student science and technology exchange meetings to encourage students to develop innovative thinking skills.

We should vigorously assist academic innovation and open up an educational model of innovative thinking. Make the academic atmosphere more active and innovative, provide diversified academic and cultural exchange platform activities, promote academic collision and exchange and sharing between student teams. Encourage students' interest in and exploration of innovative thinking, and establish safety academic experts to set up academic conferences and academic forums. Promote exchanges, promote innovation, highlight vertical and horizontal communication platforms, and school-domestic-multi-level and three-dimensional themes actively participate in international expansion. Horizontal communication between companies and academic communication systems.

Comprehensive competitions support students'practical ability to develop new mechanisms. Based on this competition, we will improve the practical skills of students seeking practical skills and safety issues, as well as the actual production capacity of the system model, and steadily improve students' practical skills.

5. Educational Feedback Mechanism of Outstanding Talents Program

In order to explore the practical effect of the model of outstanding talents education, we have established a complete system of morality, intelligence and comprehensive system for the basic theory of safety science and the basis of safety science. We must ensure that we systematically acquire the basic principles of knowledge, basic skills and safe production. Five aspects have been implemented to evaluate the talent training model, and the corresponding curriculum adjustment and personal planning improvement based on the evaluation results.

Evaluation Principles The evaluation materials of this course are used as the basis of evaluation, evaluating the graduation requirements of the course (including all educational links, including practical education), and calculating the evaluation results of the graduation requirements based on the evaluation results of each course. The assessment basis assessment is based on assessment materials for each course, including exams, classroom activities, key questions, internships and design reports, reading reports and lectures. Although the above materials reflect the student's ability assessment, it does not completely replace the "curriculum assessment" and "graduate assessment of grades". Therefore, the evaluation agencies and participants are usually specialized agencies, designated personnel of the university. The need to complete the assessment results, graduation requirements evaluation and development model evaluation, etc., is the preparation for the results evaluation report.

6. Conclusion

In order to promote the long-term and healthy development of safety engineering talents program, this paper explores how to cultivate innovative engineer training mode that meets the needs of social and enterprise economic development and at the same time achieves the goal of safety engineering talents training. The deep-seated cooperative training base between the school and the industry is combined with "production-research-research", which establishes socialized, networked and unlimited experimental and training bases, as well as production, education and research. A great and outstanding engineer's professional skills and knowledge, comprehensive quality of personnel training mode has great promotion and application value. Through the conceptual framework of the excellent talent development plan, based on the problems of current analysis and safety engineering education, starting from engineering and innovation, comprehensive research and analysis, statistical analysis, engineering practice, feedback and evaluation, the future education of different experts in colleges and universities To improve the student innovation system, innovation platform and talent training model evaluation mechanism to provide reference. I hope to help the future development of the safety engineering profession to provide some strategic advice and promote the further development of the Safety Engineering Excellence Program.

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