

Research on the Cultivation Mode of University Talents from the Perspective of Scientific and Technological Innovation

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Abstract: Scientific and technological innovation is the most important factor for China's economy to maintain a good development trend for a long time, and provides solid support for Chinese-style modernization. From the perspective of scientific and technological innovation, the study of college talent training mode is helpful to enhance the country's comprehensive competitive strength, conform to the needs of industrial form development, and promote the integration of industry, education and science. Therefore, based on the construction of industry-university-research integration personnel training framework, strengthening interdisciplinary knowledge integration ability and strengthening the construction of teachers, this paper puts forward the innovative path of college personnel training model, in order to provide theoretical reference for promoting the development of science and education and education.

Keywords: Scientific and technological innovation; College personnel training mode; Education power; Chinese modernization

Introduction

Since the implementation of the strategy of rejuvenating the country through science and education, China has always regarded the development of scientific and technological innovation as an important direction to guide the training of university personnel. The Party's 20th National Congress report pointed out that "we must adhere to the principle that science and technology are the primary productive forces, talent is the first resource, innovation is the first driving force, and thoroughly implement the strategy of rejuvenating the country through science and education". The Decision of the Central Committee of the Communist Party of China on Further Comprehensively Deepening Reform and Promoting Chinese-style Modernization adopted by the Third Plenary Session of the 20th Central Committee clearly mentions that "improve the scientific and technological innovation mechanism of universities and improve the efficiency of achievements transformation"^[1]. Strengthen the synergy between science and technology education and humanities education. The above policy deployment points out that the state has placed the cultivation of university talents from the perspective of scientific and technological innovation at a strategic high level, and it is urgent to improve the education model and subject setting according to the new trend of scientific and technological innovation and development, inject momentum into the comprehensive construction of a powerful education country, and aim to steadily promote the Chinese modernization with a high-quality education system with Chinese characteristics.

1. The value implication of the exploration of college talent training mode from the perspective of scientific and technological innovation

1.1 An important path to enhance the country's comprehensive competitive strength

At present, driven by the new round of scientific and technological revolution and industrial transformation in the world, the cross-integration of various disciplines is deepening, the breadth and depth of scientific and technological innovation are greatly expanded, the pattern of scientific and technological power is undergoing significant changes, and the global pattern of scientific and technological innovation is undergoing major changes. In the tide of scientific and technological innovation, as the cradle of training future leaders and innovators, the talent cultivation mode of colleges and universities only plays a decisive role in knowledge

inheritance, but also plays an important role in shaping the way of thinking of students and stimulating the innovation ability. Only by leading personnel training with the development trend of science and technology, increasing the proportion of scientific spirit and innovative thinking in personnel training, and forming an independent and effective personnel training model, can we seize the development opportunities, win competitive advantages, improve the comprehensive competitive strength of the country, and lay a solid foundation for future development.

1.2 The inevitable choice to comply with the needs of industrial form development

At present, with the acceleration of China's industrial upgrading, the deepening of the scientific and technological revolution, and the continuous development of emerging industries, artificial intelligence and digital technology have had a profound impact on all walks of life, and also have an important impact on the form of college talent training to a certain extent^[2]. The development of industrial form puts forward new demand for talent training, which requires practitioners to have strong compound quality. Under this background, the talent cultivation mode of traditional colleges and universities has been difficult to meet the diversified needs of talents in the development of modern industrial forms. Therefore, guided by scientific and technological innovation, colleges and universities can obtain the direction of industrial development dynamically, break the barriers of traditional disciplines, and promote the reform of interdisciplinary curriculum and teaching methods, so as to cultivate the comprehensive quality and innovation ability of students.

1.3 The core essentials of promoting the integrated development of industry, education and science

Taking scientific and technological innovation as a beacon to lead the innovation of college personnel training mode is the core of deepening the development strategy of the integration of industry, education and science. Colleges and universities deeply integrate scientific and technological innovation elements into the teaching system, which can accurately meet the cutting-edge needs of the industry, and cultivate outstanding talents with solid professional knowledge, innovative thinking and practical ability. This can not only enhance the employment competitiveness of students, but also provide a steady stream of talent support for industrial upgrading, further promote the effective connection of the education chain, talent chain with the industrial chain and innovation chain, and jointly promote the sustainable and healthy development of the social economy.

2. The demand for college talent training from the perspective of scientific and technological innovation

2.1 Training skilled personnel

In the context of scientific and technological innovation, universities need to pay more attention to cultivating students' practical skills so that they can quickly adapt to the future working environment. This means that the curriculum should be closer to practical application, pay attention to practical links, strengthen cooperation with enterprises, provide internship and practical training opportunities, so that students can accumulate rich practical experience during the school. In addition, universities should actively introduce advanced teaching equipment and technology to provide students with a learning platform similar to the future work environment, so as to cultivate professional talents who can quickly adapt to and promote scientific and technological innovation.

2.2 Cultivate critical thinking

Based on the perspective of scientific and technological innovation, universities should not only cultivate students' professional knowledge and skills, but also pay attention to cultivating their critical thinking ability. Critical thinking refers to the ability to think, analyze and judge independently when facing problems, rather than blindly accept the views and conclusions of others. Colleges and universities can set up relevant courses, organize debate competitions, and carry out scientific research projects to stimulate students' interest in thinking and cultivate their independent thinking ability and critical thinking. Students with critical thinking can better analyze and solve problems in a complex and changing social environment, so as to promote scientific and technological innovation.

2.3 Raising awareness of innovation and entrepreneurship

Facing the era background of technological innovation iteration and upgrading, colleges and universities should attach importance to cultivating students' consciousness of innovation and entrepreneurship, so that students can have the spirit of daring to try and innovate. Universities can offer courses related to innovation and entrepreneurship and provide guidance and consulting services to help students understand the market demand and entrepreneurial process. At the same time, universities should also actively build school-enterprise cooperation platforms, encourage students to participate in practical projects and accumulate entrepreneurial experience.

3. From the perspective of scientific and technological innovation, college personnel training model innovation path

3.1 Building an integrated framework for personnel training

Scientific and technological innovation requires not only theoretical knowledge, but also the ability to apply theory to practice. In the process of personnel training, colleges and universities should establish an integrated training mode of production, study and research, pay attention to training students' practical and application ability, and let students learn and master knowledge in practice through experimental courses, project-driven teaching, enterprise internship and other ways. At the same time, colleges and universities should establish close cooperative relations with enterprises and scientific research institutions to jointly develop practical teaching projects, so that students can participate in real scientific and technological innovation projects, understand the market demand, and improve the ability to solve practical problems.

3.2 Strengthen interdisciplinary knowledge integration ability

Under the background of scientific and technological innovation, talents training in colleges and universities should pay attention to the integration ability of interdisciplinary knowledge. With the rapid development of science and technology, the boundaries between disciplines become more and more blurred, and the solution of many complex problems requires the comprehensive application of multidisciplinary knowledge. Therefore, universities should encourage students to study across disciplines and develop their ability to integrate knowledge from different fields. In curriculum setting, we should break the traditional discipline barriers, set up interdisciplinary courses, and promote students to establish connections between different disciplines. At the same time, universities should provide interdisciplinary research platforms, encourage teachers and students to carry out interdisciplinary cooperation projects, take practical problems as the orientation, and cultivate students' comprehensive problem-solving ability.

3.3 Strengthening teaching staff

Teachers are the key to talent training. Only teachers with innovative ability and practical experience can better guide students to carry out scientific and technological innovation activities. Universities should introduce and train teachers with innovative spirit and practical experience, improve the overall quality of teachers by introducing high-level researchers, encouraging teachers to participate in scientific research projects, and providing training and further study opportunities.

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