

Research and Practice on the Promotion Role of Ideological and Political Workers in Colleges and Universities in Scientific Research and Education

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Abstract

As one of the basic responsibilities of a modern university, scientific research integrates knowledge discovery, talent training and the inheritance of scientific spirit, making it an inherent requirement for running a socialist university well and cultivating new talents who are responsible for national rejuvenation in the era. Ideological and political workers in colleges and universities have their unique advantages in grasping the ideological characteristics and psychological development characteristics of college students and guaranteeing the construction of study style. Therefore, it is of great significance to explore the promoting role of ideological and political workers in colleges and universities in scientific research and education.

Keywords: scientific research, talent training, ideological and political workers

At present, colleges and universities and even the whole country have fully realized the important function of college scientific research education, and have begun to explore the implementation path of college scientific research education from colleges, professional course teachers, doctoral tutors and other levels. However, there are few studies on the promotion role of ideological and political workers, the main body of implementing ideological and political education and value guidance, in colleges and universities in scientific research education.

In the practice of scientific research training in universities, "all staff" include ideological and political workers, "whole process" include experimental activities, and "all-round" should include scientific research functions, therefore, studying the specific path for ideological and political workers in colleges and universities to participate in scientific research and training is an inevitable requirement for the implementation of "three comprehensive training". At the same time, ideological and political workers in colleges and universities have strong political awareness and educational awareness. At the same time, compared with teachers of professional courses, they have a more accurate grasp of the ideological characteristics and psychological development characteristics of college students, and have their unique advantages in studying competition rules, organizing and implementing activities, creating scientific research atmosphere and guaranteeing study style. Therefore, it has profound theoretical and practical significance to explore the role of ideological and political workers in promoting scientific research and training people.

1. Research Background and Current Situation

In the period of Western classical universities, knowledge production and knowledge dissemination were undertaken by different institutions. Universities were mainly engaged in knowledge dissemination activities, while knowledge production activities were undertaken by institutions other than universities (such as the Royal Society). In this period, scientific research and teaching were separated. At the beginning of the 19th century, Humboldt established the principle of "unification of teaching and scientific research" at the University of Berlin, and put forward the concept of "from science to self-cultivation" to cultivate the "whole person", scientific research has thus become an educational method that attaches equal importance to teaching (Humboldt, W. V., 1984). At the beginning of the 20th century, Burton Clark believed that in higher education, knowledge is the basic raw material for people to work on, and teaching and research are the basic activities and main techniques for making this material, Therefore, although teaching and scientific research are different, they are actually two forms of cultivating people (Zhou, G.-L., & Ma, H.-Q., 2012). In 2015, the central government issued the

"Opinions on Further Strengthening and Improving Propaganda and Ideological Work in Colleges and Universities under the New Situation", which formally put forward the concept of "cultivating people by scientific research", pointing out that it is necessary to base on the all-round development of students and strive to build a pattern of all-round training for all staff and the whole process (China Government Network, January 19, 2015). In December 2017, the Ministry of Education issued the "Ideological and Political Work Quality Improvement Project Implementation Outline in Colleges and Universities", which proposed to give full play to the training functions of curriculum, scientific research, practice, and other aspects of work, and to formally incorporate scientific research into the "Top Ten Education" system (Ministry of Education of the People's Republic of China, December 4, 2017).

At present, domestic and foreign academic circles mostly focus on the value implication, action mechanism and practical path of university scientific research education.

In terms of value implication and mechanism of action: Li Xiaoping pointed out from a philosophical point of view in "The Essential Characteristics of University Scientific Research and Its Implications for Cultivating People": Taking labor as the essence of human beings is the basic viewpoint of Marxism on the theory of human nature. The essence of scientific research activities is a special kind of labor, which is driven by the nature of human inquiry and development. As long as it does not deviate from this human nature, scientific research activities must have the function of cultivating people (Li, X.-P., & Liu, Z.-Z., 2019). Ruan Yifan started from the normative requirements of scientific research in "Exploration and Analysis of Scientific Research Cultivation in Colleges and Universities". He pointed out that scientific research is essentially an important practical activity to promote the development of human civilization, and it must be consistent with the mainstream values of human social development and with the social morality formed by human beings for a long time, which requires that all researchers engaged in this activity must follow some basic value orientations and ethical norms such as integrity, rigor, self-discipline, etc. Therefore, scientific research itself contains rich and profound educational factors (Liu, Z.-Z., & Duan, Y.-B., 2019). Liu Xiangju started from the implementation process of university scientific research, and pointed out the following points in the article "The Value Implication and Mechanism of Cultivating People in University Scientific Research": The mechanism of scientific research education is that in the practice of scientific research, teachers and their teams focus on scientific research tasks, and realize the cultivation and transmission of scientific spirit and the experience and generation of scientific morality in the process of joint exploration and discovery of the unknown (Ruan, Y.-F., & Xu, H., 2019). Based on the actual effect of university scientific research training, Liu Jianjun pointed out in "Further Emphasis on the Status and Function of Scientific Research in University Training Personnel" that the function of university scientific research training is determined by the essential functional attribute of university "scientific research". Contemporary universities undertake the task and mission of talent training and scientific research. Scientific research has become an inherent requirement of education and teaching itself, and has become a more advanced and effective educational method for cultivating college students' knowledge, skills and ideological and moral qualities (Liu, X.-J., & Liu, Z.-Z., 2020).

In terms of practical paths: In the article "Dynamic Mechanism for the Construction of Scientific Research Training System in Universities in the New Era", Fan Wusan, from the perspective of colleges and universities, believes that building a guiding mechanism centered on the correct political direction, an internal driving mechanism centered on meeting the needs of the main body, and an external driving mechanism centered on a practical platform are powerful measures to improve the effect of scientific research training in colleges and universities (Liu, J.-J., 2015). In "Introducing the Spirit of Science: The Mission and Responsibility of University Scientific Research and Training People", Liu Zaizhou, based on the professional teachers themselves, proposed that professional teachers should strengthen their awareness of scientific research and education, fulfill their mission, strengthen value guidance, adhere to positive indoctrination, highlight behavioral demonstrations, lead others by themselves, build a team of training people, and exert a nurturing effect, so as to achieve the effect of scientific research and education (Fan, W.-S., & Xie, X.-Z., 2018). Wu Bin, in "Correctly Understanding the Relationship between Scientific Research and Cultivating People: Reflections on Doctoral Students' Participation in Scientific Research", mainly explores the role of doctoral supervisors and pointed out that the doctoral supervisor attaches great importance to scientific research education itself, abandons the utilitarian thinking that only emphasizes the results rather than the process, and reduces the "proposition composition" that directly assigns tasks. These are the prerequisites for the development of scientific research education (Liu, Z.-Z., & Tan, M.-Y., 2020).

2. Main Research Content, Basic Ideas and Methods

2.1 Main Research Content

This paper focuses on university scientific research education, takes college counselors, college students, and professional course teachers as the research objects, and conducts research from the following three aspects:

2.1.1 Research on the Mechanism of Action of University Scientific Research Training People

Scientific research education mainly refers to the ways in which teachers and their teams focus on scientific research tasks, and realize the cultivation and transmission of scientific spirit and the experience and generation of scientific ethics in the process of joint exploration and discovery of the unknown. This part takes the scientific research education system of Chinese universities as the research object, and deeply analyzes the value implication, original characteristics and implementation content of the scientific research education system in Chinese universities. By comparing with the scientific research and education systems of Western countries, especially Germany and the United States, fully explore its mechanism of action and change rules, and provide references for ideological and political workers in colleges and universities to participate in the process of scientific research and education, formulate scientific plans, and improve educational effects.

2.1.2 Research on the Specific Role of Ideological and Political Workers in Promoting Scientific Research and Education

As the main body of ideological and political education and value guidance of college students, ideological and political workers have innate advantages in helping college students establish a correct world outlook, outlook on life, and values, and lead college students to grow into talents and lead a healthy life. In order to study the specific promoting role of ideological and political workers in university scientific research education, This article takes ideological and political workers, professional course teachers, and college students as the main objects. From the perspectives of educational philosophy, implementation of education (education) groups, grasp of scientific research hotspots, study of competition rules, organization and implementation of activities, creation of scientific research atmosphere and construction guarantee of study style, etc. We compiled a questionnaire, combined with interviews and surveys to investigate the subjective and objective views, relevant practices, effects, and potential effects of ideological and political workers participating in scientific research and education, so as to provide a realistic basis for the subject research.

2.1.3 Research on the Path of Ideological and Political Workers Participating in Scientific Research and Education

At present, the ideological and political workers in our country are obviously not paying enough attention to scientific research education and awareness of participation. There is still a misunderstanding that scientific research education is the main responsibility of professional teachers, and the task of ideological and political workers is only in charge of students' ideological and political education, daily affairs management, and mental health education. Based on the current development of the scientific research education system, this project establishes an evaluation system for the effect of scientific research and education for college students, and studies the specific implementation paths for ideological and political workers to participate in scientific research education.

By carrying out ideological and political workers salons, innovation and entrepreneurship education, symposiums between ideological and political workers of counselors and teachers of professional courses, and training camps for ideological and political workers' scientific and technological innovation capabilities, they can improve their scientific research education cognitive concept and ability to perform responsibilities, and at the same time strengthen the cooperation between counselors and professional course teachers to truly ensure the effect of scientific research and education.

2.2 Research Ideas and Methods

2.2.1 Basic Idea

Based on the research idea of "mechanism research→data collection→data analysis→path construction→practice demonstration", the research is carried out by means of literature analysis, investigation and research, summarization and practical verification.

2.2.1.1 Mechanism Research

This paper analyzes the value implication, original characteristics and implementation content of the current scientific research and education system in our country's colleges and universities, by comparing with the scientific research and education systems of Western countries, especially Germany and the United States, to

fully explore the mechanism of action and changing laws of the scientific research and education system, so as to provide reference for ideological and political workers to participate in the process of scientific research and education.

2.2.1.2 Data Collection

Taking our school's counselors, professional course teachers, and college students as the research objects, from the aspects of educational philosophy, teaching (teaching) groups, grasping scientific research hotspots, studying competition rules, organizing and implementing activities, creating a scientific research atmosphere, and ensuring the construction of study style, we compile questionnaires to master the subjective and objective views, relevant practices, effects, potential effects and other information of our school counselors participating in scientific research education.

2.2.1.3 Data Analysis

Analyze the perceptions of ideological and political workers, professional course teachers, and college students themselves on the participation of counselors in scientific research education; Analyze the status and influence of ideological and political workers' participation in scientific research and education; Analyze the advantages of ideological and political workers compared with professional teachers in terms of audience groups, grasp of scientific research hotspots, interpretation of competition rules, organization and implementation of activities, creation of scientific research atmosphere, and construction and guarantee of style of study. Finally, the weight of each factor is determined according to the analysis results.

2.2.1.4 Path Construction

According to the previous analysis results, establish the implementation path for ideological and political workers to participate in scientific research and education. Ideological and political workers' salons, innovation and entrepreneurship education, professional course teacher symposiums, and technological innovation ability training camps will be used to improve the cognitive concepts and quality of ideological and political workers' participation in scientific research education.

2.2.1.5 Practical Verification

Focusing on the "transmission of scientific spirit" and "cultivation of scientific morality" in scientific research education, and in accordance with the implementation path explored in the early stage, guide the ideological and political workers of the school to carry out scientific research education work, establish scientific research files, and implement the effects of scientific research education.

2.3 Main Research Methods

2.3.1 Literature Research Method

Combing domestic and foreign researches on the value implication and origin characteristics of scientific research education in colleges and universities, analyzing and understanding the mechanism of action and changing laws, and providing reference for ideological and political workers to participate in the process of scientific research and education, and then to improve the effect of education.

2.3.2 Investigation Method

Through questionnaires, unstructured interviews, etc., the current situation and advantages of ideological and political workers participating in scientific research and education will be understood, and their participation effects will be evaluated.

2.3.3 Theoretical Teaching Method

Through lectures and training camps on theory and practice, the awareness of ideological and political workers to participate in scientific research education will be strengthened, and the basic laws and implementation methods of scientific research training will be mastered.

2.3.4 Practice Method

Actively organize ideological and political workers to guide students to participate in scientific research competitions, and organize students to carry out scientific research experiments with teachers of professional courses, so as to effectively improve their ability and level of scientific research education.

2.3.5 Inductive Analysis Method

Based on the data and materials collected from questionnaires and interviews, the research topics will be summarized. Clarify the promoting role of ideological and political workers in scientific research education, find

out an effective path for them, and on this basis, improve the whole school's scientific research education system and write research reports.

3. The Importance, Difficulty and Main Viewpoints of the Research

3.1 Key Points and Difficulties

3.1.1 Explore and analyze the unique advantages of ideological and political workers in carrying out scientific research and education compared with professional teachers in terms of educational concepts, teaching groups, and study style construction.

3.1.2 Analyze the weight of various factors that affect the effect of scientific research and education of ideological and political workers, and construct the implementation path for political workers to participate in scientific research and education.

3.1.3 Establish an evaluation system to fully evaluate the promoting role of ideological and political workers in scientific research education.

3.2 Main Point of View

3.2.1 Scientific research education mainly refers to improving students' ideological and political literacy and moral consciousness while improving students' scientific research level and ability. Exploring the promoting role and implementation methods of ideological and political workers in scientific research education can effectively expand the way and enhance the effectiveness of ideological and political work.

3.2.2 Ideological and political workers, as the main body of ideological and political education and value guidance of college students, generally have strong political and educational awareness, a more accurate grasp of the ideological characteristics and psychological development characteristics of college students, and rich experience in organizing and guiding various competitions and scientific research activities that college students participate in. Compared with professional teachers, ideological and political workers have their unique advantages in scientific research and education.

3.2.3 Enhance the awareness and willingness of ideological and political workers to participate in scientific research and education, guide ideological and political workers to construct participation paths by organizing science and technology training camps, innovation and entrepreneurship training, etc., and build a bridge between counselors and professional teachers for collaborative education. The above are important measures to improve the scientific research and education level of ideological and political workers and ensure the effect of scientific research and education.

4. Theoretical Innovation

4.1 The promotion role and implementation path of ideological and political workers groups in scientific research education are innovatively discussed, which is conducive to improving the comprehensiveness and integrity of scientific research education research.

4.2 Based on questionnaires and unstructured interviews to explore the unique advantages of ideological and political workers in scientific research education, using SPSS to analyze and quantify the weight of each influencing factor, and construct a scientific and effective implementation path for ideological and political workers to participate in scientific research education.

4.3 Study the mechanism of scientific research education in colleges and universities through the literature survey method, and to quantify the promotion effect of ideological and political workers' participation through questionnaire surveys and interviews. Finally, it is proposed to improve the ability and level of ideological and political workers to participate in scientific research and education by carrying out innovation and entrepreneurship forums, science and technology training camps, etc. his research combines theory with practice, qualitative analysis and quantitative analysis.

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