

Discussion on Innovative Education of College Students Based on Scientific Research Literacy

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Abstract: Strengthening the innovative education practice of college students will not only help students realize their self-worth, but also promote the scientific construction of the country and accelerate the construction and development of the socialist economy. However, the current practice of innovative education for college students is faced with the dilemma that the innovative educational environment is not systematic enough, and the innovative education ignores students' subject consciousness. In this regard, it is necessary for colleges and universities to strengthen innovative education reform and optimization from the perspectives of educational environment and educational system. This paper briefly expounds the necessity of college students' innovative education practice based on scientific research literacy, analyzes the plight of college students' innovative education practice based on scientific research literacy, and explores innovative education practice strategies for college students based on scientific research literacy. innovative talents.

Keywords: Scientific research literacy; College students; Innovative education

Introduction

In the new era, innovation is the basic guarantee of modern education. Relying on the innovative education system and teaching form of colleges and universities, we can comprehensively improve the innovative thinking and professional quality of college students, so as to achieve the purpose of innovative education. The original intention of college students' innovation education is to "praise innovation", "pursue innovation" and "apply innovation", and then help college students to establish correct values. Only in this way is the inherent value demand of sustainable social development. However, the current practice of innovative education for college students is still faced with the dilemma that the innovative education environment is not systematic enough, and the innovative education ignores students' subject consciousness. In this regard, it is necessary to analyze and discuss the practice strategies of college students' innovative education based on scientific research literacy, which has positive reference significance for the reform and optimization of college students' innovative education.

1. The necessity of innovative education practice for college students based on scientific research literacy

1.1 Help students realize self-worth

The innovative educational practice of college students based on scientific research literacy helps students realize their self-worth. The rapid development of the education industry in the new era has put forward higher-level requirements for innovative talents. At the same time, the continuous update and iteration of information science and technology has also put forward urgent needs for the innovation ability, application ability and quality ability of college students, requiring innovative talents cultivated by colleges and universities to accurately grasp the opportunities of the times and provide more high-quality social development. Talents. By strengthening the innovation education of college students, it can effectively help college students realize their ideals, beliefs and value goals, so that they can adapt to the development trend of the times, realize their self-worth in the new social era, seize the opportunities of the times, and serve the public. Therefore, it is necessary to strengthen the innovative education practice of college students.

1.2 Contribute to the promotion of national science and technology construction

The innovative education practice of college students based on scientific research literacy will help promote the construction of national science and technology. The innovative education of college students includes the cultivation of innovative thinking, innovative consciousness, innovative practice, innovative service, innovative ability, innovative skills and many other aspects. Strengthen the innovation education of college students, from ideas, thinking to skills, comprehensive ability, and comprehensively cultivate the innovation and creativity of college students. The innovative education of college students based on scientific research literacy can effectively cultivate college students' scientific research literacy and gradually improve their scientific and technological innovation ability by carrying out relevant practical activities. In this way, it can contribute to the construction of my country's science and technology, so that my country's science and technology can gradually develop in a better direction.

2. The plight of college students' innovative education practice based on scientific research literacy

2.1 The innovative education environment is not systematic enough

The lack of systematization of the innovative education environment is one of the dilemmas of college students' innovative education practice, mainly as follows: First, from the perspective of the management environment, the management thinking is not advanced and unified, the management authority is decentralized, the division of powers and responsibilities of various functional departments is not clear enough, and the various departments are not clear enough. Poor communication and lack of collaboration increase the difficulty of management. Moreover, lack of their own single goals, management goals are scattered, and goals are not unified, which is easy to cause delays in management work. Second, from the perspective of the institutional environment, the defects of test-oriented education still play a role in the process of innovative education. Whether it is the student admissions test or the post-admission academic level test, the overall environment for the implementation of innovative education is greatly affected by the disadvantages of test-oriented education. The learning mode of students also tends to be "rote memorization" and "cramping" before exams. This mode greatly affects the development of innovative education, and the continuity of learning is difficult to guarantee.

2.2 Innovative education ignores students' subject consciousness

The ignoring of students' subject consciousness in innovative education is one of the plights of college students' innovative education practice. The main manifestations are: First, ignoring students' subject consciousness. Under the premise that the country pays more and more attention to innovative education, although some colleges and universities have implemented innovative education, they have not made too many changes in the education model, and still continue to use some traditional teaching methods, ignoring the play of students' subjectivity. Students passively accept the curriculum set by the school, the memory model is mechanical, and there is a lack of experiential classroom experience. In the long run, not only will they fail to develop and develop students' creativity, but also affect students' personal growth and development. Second, there is a lack of correct understanding of the innovative talent training model, insufficient understanding of the importance of the cultivation of students' innovative ability, and a lack of targeted training courses for creative behavior.

2.3 Lack of high-quality scientific research practice platform

Lack of high-quality scientific research practice platform is one of the plights of college students' innovative education practice. With the implementation of innovative education, focusing on scientific research literacy, cultivating college students' scientific and technological innovation ability is the main goal of innovation education in colleges and universities. To achieve this goal, colleges and universities must build an effective scientific research practice platform for students, so that students have sufficient scientific research practice opportunities to train their scientific and technological creativity and innovation ability. Therefore, building a high-quality scientific research practice platform is an important guarantee to promote the effective implementation of innovative education for college students. However, considering the current implementation of innovative education in colleges and universities, the construction of high-quality scientific research practice platforms is still relatively lacking. The innovation consciousness of college students and the improvement of their comprehensive quality are directly related to the learning environment they are in. Whether the innovation ability of college students can be fully developed and brought into play is related to the construction and development of the school's scientific research platform. Although some colleges and universities have implemented innovative education, they have not paid enough attention to it. They have not invested much time, energy and funds in this area, resulting in the imperfect construction of scientific research practice platforms, which cannot provide undergraduates with basic scientific research practice training, experimental conditions, practice venues and The lack of laboratory equipment and the lack of practical opportunities for

college students makes it difficult for scientific and technological innovation activities to continue.

3. Innovative educational practice strategies for college students based on scientific research literacy

3.1 Optimizing the innovative education environment with joint efforts

For the problem that the innovative educational environment is not systematic enough, colleges and universities should optimize the innovative educational environment and promote the innovative educational practice of college students. First, improve the school education environment. Colleges and universities should be committed to cultivating high-quality compound talents with attainments in professional knowledge and innovation ability, so that students can learn to look at practical problems from a professional perspective and use professional methods to solve problems; strengthen the teaching of theoretical knowledge and increase practice. The proportion of class hours, build a “theory + practice” education model, guide practice with theory, verify theory with practice, and enrich the results of innovative educational practice; strengthen school-enterprise cooperation, encourage students to actively participate in social practice, establish a reasonable operating mechanism, and use the media to strengthen activities. The promotion efforts to encourage students to actively participate. Second, cultivate a social environment suitable for the development of innovative education. Establish a correct sense of innovation, promote corporate culture to students with the help of school-enterprise cooperation, and students can also take this opportunity to expand their academic horizons and practical opportunities; guide the media to regularly promote innovation culture and promote effective communication between schools and society, so that teachers and students can better understand the needs of society, better implement innovative education, and then cultivate more talents that meet the needs of social development. Third, unify the management thinking, clearly divide the management authority and responsibility, set the general goal of innovation education, and combine the functions of the department to refine the goal, and set a single goal for each department. At the same time, build a collaboration mechanism, strengthen communication and cooperation between various departments, coordinate and participate together, and improve the efficiency of innovative education implementation.

3.2 Improve the innovative education system based on students

In response to the problem that innovative education ignores students' subject consciousness, colleges and universities should implement the concept of student-oriented, clarify students' subject consciousness, and improve the innovative education system. On the one hand, colleges and universities should have a correct understanding of the innovative talent training model and a profound understanding of the importance of cultivating students' innovative ability. On this basis, carry out more targeted training activities to improve students' innovative ability. At the same time, colleges and universities should thoroughly implement modern educational concepts and implement them in every corner of innovative educational practice, innovate educational models, attach importance to students' subject consciousness, allow students to participate, give play to their subjective initiative, and promote the effectiveness of innovative education. implement. On the other hand, colleges and universities should take innovative practice ability as the evaluation standard of innovative education, strengthen the coordination and cooperation among various disciplines, strive to develop the connection between various disciplines, dilute the boundaries between them, strengthen exchanges and cooperation, and collaboratively cultivate talents; Focus on developing opportunities for cultivating students' innovative ability outside the classroom, and excavate factors that are conducive to cultivating their innovative ability in their extracurricular life. At the same time, the school should take the initiative to bring students' innovative achievements to the market and deepen the connection with the society. While understanding the market demand, it can also continuously adjust the innovative education implementation plan to enrich students' innovative achievements; for students with relatively solid professional foundation, some Professional knowledge is subtly integrated into the innovative education curriculum, and the innovative factors contained in the major are excavated, and the two are organically integrated to cultivate students' innovative thinking.

Epilogue

To sum up, the innovative educational practice of college students based on scientific research literacy can not only help college students realize their self-worth, but also promote the construction of science and technology in my country. At present, the innovative education practice of college students based on scientific research literacy is faced with the dilemma that the innovative education environment is not systematic enough, the innovative education ignores students' subject consciousness, the lack of high-quality scientific research practice platform, and the weakening of the cultivation of scientific research literacy in innovative education. In response to these problems, colleges and universities should optimize the innovative educational environment with joint efforts; improve the innovative educational system based on students; increase funding to build a scientific research training platform; innovate

educational concepts and build a stage for scientific and technological innovation activities. The research on innovative education of college students based on scientific research literacy in this paper is not perfect. In the future, we should continue to pay attention to the relevant research trends of innovative education for college students based on scientific research literacy. Practical strategies to make up for the lack of research in this paper.

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