

Research on the Path of Scientific Literacy Improvement of College Students in the Background of Talents Strengthening the Country

Jie Yu

College of Life and Environmental Sciences, Hangzhou Normal University, Hangzhou, Zhejiang, 310036, China

Keywords: University Student, Scientific Literacy Improvement,

Abstract: In university education, the improvement of college students' scientific literacy should be placed in an important position. Through the establishment of university science popularization jobs, the establishment of a corresponding public elective course system, regular scientific lectures, and rational use of science and technology communication content in the mass media, all aspects of the scientific literacy of college students are enhanced.

1. Introduction

"Scientific literacy" is also called scientific quality. It belongs to the knowledge and ability that individuals need to have in dealing with their external relations with nature and society. It is also the scientific and cultural knowledge that people should possess and the ability to apply scientific and cultural knowledge. According to the theoretical viewpoints of the international scientific community and the education sector: The higher the level of scientific literacy of the public, the more beneficial it is to social development, and the university students are the main force in the process of construction and development of our country, the level of scientific literacy, and the development of the country. The role of progress is not to be repeated.

2. The necessity of scientific literacy training for college students

Whether considering the individual development of college students or considering the overall development of the country and society, it is very necessary for college students to receive scientific literacy training.

For our country, high-quality talents need to be based on their own work, facing the whole society, emphasizing practical application. In the view of this demand, college students, as an important supplementary force of social development, and their scientific literacy training effect, will inevitably attract the attention of schools and educators. In a certain sense, the commitment to the cultivation of college students' scientific literacy will contribute to the true establishment of college students' outlook on life, values and worldview, thus laying the foundation for them to become high-quality talents. At the beginning of this century, China formulated a national science literacy action plan. It is expected that by the 20th anniversary of the founding of New China in 2049, all adult citizens can meet the scientific literacy standards. Today, the proportion of citizens with sufficient scientific literacy is still less than 5%. This is very disproportionate to China's economic development level, and it also seriously affects China's dream of becoming a world power. As for college students, as an important supplementary force for social development, the overall level of scientific literacy has a great effect on the promotion of scientific literacy for all people, so it should be the priority target.

3. Analysis on the Ways of Cultivating College Students' Scientific Literacy

We observe that many developed countries in the world attach great importance to the scientific literacy training of citizens, especially college students. For example, in the United States, there are two specific work worthy of our attention. One is that the government departments take the civic

science literacy training as the starting point. The government conducts a nationwide civic scientific literacy survey every two years. From the Clinton administration to the later Bush administration, the Obama administration, and the Trump administration, the issue of raising the scientific literacy of all people will be mentioned as one of the important strategic goals of national development, and a special scientific literacy incentive fund will be given. stand by. Our country can also follow this policy and consider arranging special funds to support the scientific literacy training of citizens including college students. The second is that the government departments make full use of the general education model in order to improve the scientific literacy level of college students, so that college students must receive scientific education for a certain period of time, and arrange corresponding interdisciplinary science and technology courses. Improve the scientific literacy level of college students.

Adjusting the curriculum to make the teaching method as rich as possible is an important way to promote the scientific literacy of contemporary college students. Specifically, changes in the following measures can be considered. One is to increase the content of the introduction to science and technology, to note the practical problems of the weak autonomy of college students, to consolidate their abilities in the form of compulsory courses, and in the process Forming a mode of experimentation of arts and sciences, for example, in the group of students of literature and history, modern science basic courses can be arranged, and modern sociology basic courses can be arranged within the group of science and engineering students. The second is to ensure that the elective course involves a wider range of content and enhance its practicality. Because elective course setting is an important supplement to education, it is also a necessary link to expand knowledge. For this reason, universities need to pay attention to the corresponding guidance and supervision. For example, increase the elective course credits, enrich the content of elective courses, and make them close to the perspective of scientific literacy. The third is to open related topics. Colleges and universities can add a series of lectures on the humanities spirit and popular science knowledge on the campus. The lectures arranged should be effective and effective, and during the same period, the publicity should be increased to fully mobilize the students' enthusiasm for participation. With the help of the mutual infiltration of arts and sciences, students of science and engineering have the opportunity to be immersed in humanistic knowledge, and students of literature and history have the opportunity to receive the training of natural science knowledge.

Based on the second classroom expansion of students, it is a more fundamental approach to promote the improvement of college students' scientific literacy. For college students, the essence of their scientific literacy improvement is the progress of subjective initiative, and the second classroom expansion can meet this requirement. Institutions of higher learning can adopt ways to encourage students to participate in various debates, popular science knowledge contests, and holiday social practice activities, so that they can be invested in related activities in different capacities. At the same time, college students can be encouraged to form various types of interest groups, such as astronomical interest groups, photography associations, mathematical research groups, environmental public welfare groups, robotics research associations, and so on. Among these interest groups, students will be driven by the task to actively realize the self-identity, self-development and synergistic progress of scientific literacy training.

Colleges and universities should start from all angles and create an environment that contributes to the cultivation of students' scientific literacy. In a sense, the role of creating an atmosphere in all directions is crucial to promoting the scientific literacy of college students. It should be said that the process of producing scientific literacy is inseparable from the support of a strong scientific atmosphere. A relatively good scientific atmosphere can affect the learners' thoughts and actions invisibly and promote their strong influence on the humanities or natural sciences. The interest in this to ensure the formation of scientific literacy awareness, it turns out that this is very crucial. This is like what some scholars have said: Those who want to use it must first enter the country. As for how to cultivate a good scientific literacy atmosphere from multiple angles, you can consider starting from the following two aspects. The first is to increase the influence of the social environment and the power of infection. From the perspective of society as a whole, we need to

increase broadcasting, television, and the emerging network propaganda, set up specialized work departments or foundations, etc., and also hold corresponding knowledge contests on a regular basis. humanities or natural science lectures, etc., so that college students are in a good scientific literacy environment. A large number of foreign practice results show that the efforts made at the social level tend to be more long-term and stable. The second is to strive to create a more diversified and three-dimensional campus internal scientific environment. This is because the campus is an important place for students to learn and live. The environmental atmosphere is the most direct and profound. Therefore, we need to use the following methods to make the campus a more flexible soft environment for science education. For example, we can consider setting up a science and technology festival based on campus or faculty, and encourage various types of scientific and technological works to be invested in it. Students participate in science competitions as a group, and can also organize corresponding humanities science and technology lectures, student science and technology works and so on. In addition, the school makes full use of the original publicity media on campus, such as campus radio, Internet TV, etc. It is also a very common practice to popularize the world's advanced humanities and scientific and technological achievements to students.

Researcher Wu Yishan, chief engineer of the China Institute of Science and Technology Information, once commented that “the role of scientists in science communication is like a setter, and the mass media is a smasher. Through the amplification of the mass media, the effect of communication is obvious.” The author believes In addition to setting up corresponding science posts and public elective courses, and conducting regular scientific lectures, colleges and universities can also use the mass media to nurture students' scientific literacy and guide them to develop scientific vision and perspectives. At present, the mass media is still the main channel for Chinese people to obtain scientific and technological information. Among the vast amounts of information provided to a wide audience, a considerable part is scientific and technological information. The results of the Eighth Chinese Citizen Science Literacy Survey show that, current TV and newspapers are still the main channels for Chinese citizens to obtain scientific and technological information, occupying the first two of the utilization ratios, reaching 87.53 % and 59.12% respectively. In other media, the proportion of people using conversations was 42.98%; the Internet was 26.61%; the broadcast was 24.58%; the general magazine was 12.20%; the books were 11.88%; the scientific journals were 10 .48%. At the same time, the survey showed that the proportion of citizens using the Internet channel to obtain scientific and technological information increased by 20.2 percentage points compared with 6.4% in 2005, which is the fastest-rising medium. The Internet and mobile phones with the highest utilization rate of students are all included in the video, audio and newspaper reports of the TV, so that the scientific information that students can get can be measured in large quantities. The key is to guide students to pay attention to and use relevant scientific and technological information in the mass media. As a teacher, students can be guided by the progress of the professional curriculum to integrate relevant scientific information in the mass media. Teachers of the science and technology elective course can let students focus on the “science in life” activities. Any science will ultimately serve our lives. Therefore, it is a good way to promote students' scientific literacy by guiding students to pay attention to scientific information in the mass media.

4. Conclusion

The cultivation of scientific literacy for contemporary college students is a strategic choice that is closely related to China's future higher education and contributes to the cultivation of talents. It is an important measure to comprehensively promote the scientific literacy of our citizens. Because of the changes in the social environment in the new era, especially due to factors such as the education system, the university environment, and the students' own situation, there is still much work to be done in the scientific literacy training of college students in our country. Facts have proved that only through the joint progress of multiple channels can we ensure the smooth realization of the overall goal of scientific literacy and provide the necessary guarantee for future higher education and social development.

References

- [1] Li Wenlin. Analysis of the basic connotation and cultivation of contemporary college students' scientific literacy [J]. Economic Research Guide, 2016 (27): 143 - 143.
- [2] Zhao Yinjuan; Dai Tingting and other microbiology teaching to cultivate the scientific literacy of college students [J]. Education Modernization, 2017 (7): 85 - 86
- [3] Guo Yahui; Yan Hongguang. Cultivation of college students' scientific literacy under the perspective of general education [J]. Science and Technology (Mid-time), 2017 (17): 98 - 99
- [4] Guo Xiaojie. Discussion on the analysis and training strategy of college students' scientific literacy [J]. New West (Theoretical Edition), 2015 (1): 45 – 46.