

Research on the Influence of Science and Technology Advancement and Social Progress on the Ideological and Political Education Work in Colleges and Universities

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Abstract. The advancement of science and technology has changed all aspects of social productivity and production relations, people's lifestyles and educational concepts. The advancement of science, technology and society has also imperceptibly influenced the thinking, character and personality, behaviors and many other aspects of college students in the new era. Therefore, scientific and technological means for achieving sustainable development of education through data, making full use of the network information platform to create a positive and educational environment, deepening the concept of data, and strengthening the construction of scientific and technological talents are the new requirement for scientific development and social progress in student work.

1. Introduction

The advancement of science and technology and the rapid development of the economy lead to earth-shaking changes in various fields of society. Faced with a world of economic globalization and cultural diversity, China's social life, politics, economy and education are facing new challenges. Social progress and reform have profoundly affected China's higher education. It can not only broaden the broad learning horizons of college students, provide a superior learning environment for college students, and create more opportunities for exercise and practice, but it brings tremendous influence and change to the life learning style, view of life and world and values of college students. Therefore, in-depth study of the progress of science, technology and society has brought impact to the ideological and political education work of colleges and universities. It can not only help the traditional ideological and political education work in colleges and universities to respond to new challenges but also provide theoretical contributions for the path innovation of ideological and political education in the new era.

2. The impact of advancement in science and technology on social development

Science and technology and human society are inseparable. Historical materialism believes that science and technology are the productive force in the form of knowledge. It can penetrate into laborers, labor materials and labor objects, and transform these basic elements into real productive forces so that the social production system can be structurally adjusted and social productive forces can gain intrinsic growth, thereby improving the social and economic operating environment and system status and promoting the development of human society. Science and technology not only have a decisive influence on social productivity and production relations, but also change people's educational concepts and ways of thinking and greatly influence the world's political and economic structure.

2.1 Science and technology have a decisive influence on social productivity and production relations.

Science and technology have expanded the scope of labor objects and improved the cultural level and overall quality of workers. With the continuous development of society, science and technology have opened up many new fields in society, expanding the use and transformation of natural resources. A series of emerging industries have been rapidly established, such as bioengineering, new energy, energy conservation and environmental protection, electronic information and other industries. In a society of knowledge and economy, science and technology and scientific knowledge play a decisive role. The technical ability and knowledge of laborers determine the speed of productivity development and the level of social and economic improvement. Therefore, science and technology education for workers to improve their labor skills and knowledge is one of the important ways to develop social productivity.

Science and technology have brought about major changes in production tools. The development of science and technology has created and updated production tools, which are an important indicator of productivity and the development of science and technology. The renewal of production tools will bring tremendous progress and leap to social productivity. The emergence of textile machines and steam engines has replaced some of the physical labor. The generation and development of technologies such as electric power and internal combustion engines has enabled human society to enter the electrical age. Technologies such as computers, Internet, and the Internet of Things have helped people to shake off heavy mental work, and the sharing of information and resources has broadened people's horizons, enriched people's lives, and increased labor productivity.

Science and technology make social management more scientific. With the continuous advancement of science and technology and the further transformation of labor tools, the traditional methods of experience-based management failed to adapt to the new development situation. Therefore, in the late 19th and early 20th centuries, Taylor's scientific management theory emerged, which standardized the management of enterprises. After the Second World War, management has undergone new changes, achieving management organizations and methods featuring specialization, centralization, and large-scale.

2.2 Science and technology have changed the way of living.

The advancement of science and technology can not only make people's material living conditions and living environment more intelligent and convenient, but also enhance people's spiritual life quality and bring human society into the era of science and technology. With the help of science and technology, people can enjoy high-quality fruits and vegetables in any season, and enjoy the convenience brought by artificial intelligence. Transportation and communication have changed the ways of communication, entertainment and learning; broadcasting, television, film, Internet and other means of communication have enriched the ways of learning and communication. They all play an irreplaceable role in updating people's thoughts and ideas.

2.3 Science and technology have changed people's educational concepts.

The advancement of science and technology has gradually transformed the knowledge industry to a leading industry. In this increasingly knowledgeable, scientific and modern society, people pay more attention to the importance of education. At the same time, science and technology have opened up many new fields in society, and some emerging industries have been established. The demand for talents in the new industry promoted development of education, enabling people to realize the advancement and importance of new disciplines and new industries. The comprehensiveness of science and technology makes the education in modern society more focus on the cultivation of comprehensive ability and quality and transforms the education method from emphasizing single professional knowledge and skills to one that regards professional basic knowledge as the foundation and other comprehensive knowledge as support.

3. Impact of the development of science, technology, and society on college students

Young people living in different eras will be marked with distinctive characteristics of the times and mainstream thoughts in this era. In this era featuring rapid economic development, globalization, various ideologies and cultures greatly changed the thinking and behavior of college students in the new era. Therefore, individuality, energy and self-confidence, divergent thinking, strong curiosity, knowledge, strong ability of learning, thinking and expression become the mainstream characteristics and advantages of the students born after 2000. In the meantime, procrastination, dependence of Internet, premature advancement of thoughts, and weak psychological endurance become common shortcomings and weaknesses of those students.

3.1 Inner loneliness and desire for understanding and care

Those born after 1900 and 1980 are the only children in the family under the family planning policy in China who grow up and live without the companionship of brothers and sisters. For those born after 2000 that live in the era of popularization of electronic networks, they communicate via modern tools such as the Internet and telephone. Compared with the “post-80s” and “post-90s” generations, they lack the opportunity for face-to-face communication and spiritual communication. In the face of collective life, some “post-00s” who are used to lonely life often separate themselves from others, but they are eager to be concerned and cared. Therefore, students who are more introverted and do not like to communicate with other should be paid more attention, and given more chances to communicate with their classmates and increase the trust of such students in teachers and classmates, so as to lay a good foundation for further education.

3.2 A poor sense of sharing with others, requiring patience and correct guidance and education

Comfortable life and the relatively rich material conditions gradually make “post-00s” egoistic and less aware of sharing. Most self-centered “post-00s” students should have more awareness of cooperation in their study and life. Some team activities should be organized so that they can know more about each other and enhance friendship while completing tasks.

3.3 Poor distinguish and self-protection abilities

College students who have just stepped into independent life have a sense of freshness and curiosity about everything. They have little life experience, little contact with the society, and little social political experience and practical exercise; therefore, they are easy to be overwhelmed by some emotional problems and social temptation. In this way, college counselors and teachers are required to do a good job in safety education and self-protection awareness education in advance, so that students can learn about how to handle similar situations with practical examples. It also lay a good foundation for student to calmly solve problems to come.

3.4 Premature development of thought

“Post-00s” students have premature development of thought. The phenomenon of falling in love in college and universities has become more common. Quick love-falling and breaking-up is also more common to see. Therefore, it is necessary to infiltrate correct views of love in their daily life so that students will not lose direction because of personal emotions and social unhealthy trends.

4. New requirements of the advancement of science and technology and the work of students

4.1 Use technology to achieve sustainable development of education through data

Big data platform can analyze in detail the student’s admission information and the data collected and feedback from the student campus card. Through the student’s consumption amount, consumption location, consumption target, learning time, reading type, etc., each student’s hobbies, interests, learning preferences, and spending strength can be mastered. Combined with other kinds of information such as gender, age, ethnicity, and place of origin, the income level and customs of

students' families can be mastered. Through data analysis, hidden problems can be identified in advance so as to seek corresponding management and education rules.

4.2 Make full use of the Internet platform to create a positive educational environment

With the continuous development of the Internet, the network has become an important part of people's lives. The ideological and political education work in colleges and universities can make full use of information technology such as the Internet, big data, and Internet of Things to publicize positive energy. Ideological and political education network groups and political education websites can be established to attract college students by engaging in positive energy film exhibitions, sharing of positive energy stories, providing professional knowledge of subjects and rewarding contests. It is necessary to enhance the knowledge content, entertainment level and service quality of these websites so as to give full play to their implicit education function.

4.3 Deepen the concept of data and strengthen the cultivation of scientific and technological talents

It is necessary to emancipate the thought, vigorously promote the concept of data, information and network work in colleges and universities, and cultivate the scientific and technological sensitivity of the ideological and political education team. In addition, relevant scholars or experts should be invited to train university ideological and political educators and administrators to learn more about big data and other information technology expertise. Educators and managing staff should be encouraged to go to well-known universities or research institutes to study the major of data, information and networks. Science and technology forums and data skills competitions and other activities should be held regularly to effectively cultivate more science and technology professionals in the ideological and political education team.

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