Research on network ideological and political education under the background of 5G

Wang Lu
Central University of Finance and Economics, Beijing, China

Keywords: 5G; network ideological and political education

Abstract: The vigorous development of 5G technology and its broad market application prospects bring technological changes to all walks of life. And researching ideological and political education work under the background of 5G is inevitable in order to facing new technology and new environment. And these research can provide new research ideas and methods especially in the expansion of ideological and political education technology vision, network ideological and political education of interdisciplinary research, deepen the network ideological and political education basic theory research.

1. Introduction

With the continuous acceleration of the human informatization process, the number of users and business volume of the mobile communication network have shown an explosive growth, and the mobile network technology has also ushered in a new development opportunities and challenges. Compared with traditional 4G networks, 5G networks have a higher rate of bandwidth access level, which can realize network interconnection with lower access costs and management costs in all IoT devices, providing more possibilities for the development of mobile applications. Since the development of ideological and political education, it is necessary to understand the changes of ideology and behavior produced by technology to the educational object, educators and educational environment, so as to turn the understanding into use, empower the ideological and political education itself with technological advantages, and explore new ways and methods for ideological and political education.

2. Research background

Since the vigorous development of computer in China, the network ideological and political education has gradually become an important position of ideological and political education in China. Liu Mei in 2000[1] first explicitly put forward the network ideological and political education, network ideological education research has experienced the early exploration, growth stage, present the booming development, in 2004 the central "on further strengthening the opinions of college students' ideological and political education" clearly put forward to "actively occupy network new position of ideological and political education", its growing importance. In August 2019, the General Offices of the CPC Central Committee and the General Offices of the State Council issued several Opinions on Deepening the Reform and Innovation of Ideological and Political Theory Courses in Schools in the
New Era\textsuperscript{[2]}. It puts forward: "vigorously promote the reform of ideological and political teaching methods, improve the information ability and literacy of ideological and political teachers, and promote the application of modern information technology such as artificial intelligence in ideological and political teaching", which defines the development direction of the integration of network ideological and political education and information technology.

5G technology, namely the fifth generation mobile phone mobile communication standard, 5G technology is established, the network has ultra-high network transmission speed, can be connected with lower access costs and management costs in the Internet of Things, providing more possibilities for the further development of mobile applications. Compared with 4G, 5G not only considers people and people, but also fully considers the connection requirements between people and things, and between things and objects. It pays more attention to performance indicators, such as rate, delay, and connection density: transmission rate by 10-100 times, peak transmission rate to 20 Gbit/s, end-to-end delay to ms level, connection device density by 10-100 times, flow density by 100 times, spectrum efficiency increased by 3-5 times, and can ensure user experience at a speed of 500km / h. The ultra-high reliability of 5G technology and ultra-low latency communication (uRLLC) make 5G technology have huge market potential. Therefore, in the fourth Industrial Revolution, 5G technology plays the role of "transmission" of massive data, that is, relying on the communication rate advantage of 5G communication technology to realize the real-time transmission of massive data, so as to provide data support and data basis for artificial intelligence and machine decision-making.

"4G changes life, and 5G changes society". Previous iterations of information and communication technology are bound to bring about a profound social change. The broad application prospect of 5G is based on the integration and development with all walks of life. With the expansion of network coverage and the popularization of terminals, 5G and vertical industries will accelerate the breakthrough and integration, and accelerate the empowerment of thousands of industries. Therefore, the network under the background of ideological and political education innovation theory and practice, its core can be understood as the research in the future under the background of network ideological and political education theory logic and application logic, for the ideological and political education work facing new technology development based on and challenge has certain theoretical significance and practical significance.

(1) Studying the network ideological and political education under the background of 5G is a realistic response to the technological changes in the new era

As Xi said: "a new round of global technological revolution and industrial revolution is deepening", the Internet technology is profoundly influence and change in today's social practice, as the key technology of the fourth industrial revolution, the development of 5G network means that the development of the cause of socialism with Chinese characteristics won the new innovation driving force, for the network ideological and political education expanded the new research path and research methods. Therefore, the study of network ideological and political education under the background of 5G is a realistic response to the fourth industrial technological change.

(2) The study of network ideological and political education under the background of 5G is a rational reflection of the current practical situation of network technology in the ideological and political field

To study the behavior characteristics, communication characteristics and educational characteristics of ideological and political education under the background of specific network technologies such as big data and new media can provide important guidance for ideological education work to stick to ideology in the "network position". Starting from reality, the characteristics and advantages of various Internet technologies in ideological and political education have not been given full play, and the pertinancy and significance of education need to be improved. And 5G technology itself has the transmission advantages and characteristics of the network ideological and
political education of education content, revolutionary change education way, therefore, the 5G era network ideological and political education is the cloud computing, big data, technology of the Internet in the field of ideological and political education practice rational reflection and experience summary, the network ideological and political education work encountered difficulties and bottlenecks, to 5G technology network innovation and development of ideological and political education work to provide theoretical basis and realistic basis.

(3) Studying the network ideological and political education under the background of 5G is the internal demand of theoretical development

The Internet brings people not only the improvement of transmission rate, the change of life style, but also the change of relevant theories, and gradually forms many interdisciplinary disciplines including network economics, network ethics, network sociology and so on. As ideological and political education in the scope of the Internet expansion and extension, the development of ideological and political education needs we consciously to the network, under the background of the network, ideological and political education theory connotation and extension of in-depth study, to promote the network, the ideological and political education work in the transformation of 5G era occupation "ideological", let network ideological work in vigorous vitality in the future.

Of course, with 5G technology as a network ideological and political education in the face of the fourth point of industrial technology revolution, does not mean that we should blindly optimistic attention behind the research value, on the contrary, we should on the network of ideological and political education institute difficulties have full understanding: 5G technology application development is insufficient to some extent limited our practice basis: it is generally believed that 5G era will be in terms of Internet access speed, VR content implementation and Internet of things bring revolutionary changes, is bound to profoundly affect all aspects of social production and life. However, it has not taken a long time for 5G technology to develop in the commercial stage, and its application development has just started, so it will take time to show its technological advantages. Therefore, the realistic development level of 5G technology restricts the practical basis of network ideological and political education to some extent.

3. Research status

3.1 Status quo of foreign research

Foreign to "network education education work" the focus on the ideological education direction, focusing on the macro perspective of network technology network influence on the whole social ideology, such as mark post, the second media era, manuel card, the rise of network society, etc. On the whole, due to the different social, economic, political and historical and cultural backgrounds of different countries, although foreign scholars rarely mention ideological and political education, but focus on the influence of the Internet, especially new media, new technology on people and society, which has certain reference value for the study of domestic network ideological and political education.

3.2 Domestic research status quo

The research on network ideological and political education in China is constantly enriched and developed with the deepening of people's understanding of the network. It mainly focuses on the practice and research status of ideological and political education, analyzes the existing problems and difficulties, and discusses the solutions and countermeasures, so as to realize the innovative development of network ideological and political education. At present, in the research direction of network ideological and political education under the background of network technology, it mostly
focuses on the research of the possible innovation brought by big data and new media to network ideological and political education in China. Specifically, Zhang Yu and Zhang Zaixing's research on network ideological and political education is innovative and hierarchical, pointing out that a large number of research results show "lack of deep understanding of the characteristics of network technology, and lack of attention", and "lack of research on multidisciplinary joint research"; Xie Yujin believes that we should "effectively carry out the complexity research of the time and space of classroom teaching"; Li Yong, 5G technology has put forward the requirements of reform and innovation for "the teaching content, teaching methods and teaching concept of ideological and political courses in colleges and universities", and how to use 5G technology to "promote the efficiency and quality of ideological and political courses in colleges and universities"; Duan Peng theoretically studied the possible impact of the intelligent propagation law and technology application logic driven by 5G on the mainstream ideology.

CNKI, according to 5G technology and network ideological and political education as keywords, domestic research began in 2017, developed in 2019 to 2023, the research focus on 5G technology to the network ideological and political education may produce opportunities and challenges, but the number of the research and depth improved, shows that 5G technology under the network ideological and political education research is still in its initial stage of development, has a broad research prospects.

4. Research on innovation points

Studying the innovative development of network ideological and political education under the background of 5G technology is the new requirement of the new era, which is of great significance to promoting the adaptive and innovative development of network ideological and political education research under the background of new technology.

4.1. Expand the technical vision of network ideological and political education research

With 5G technology as the background of the new era of network transmission technology of network ideological and political education theory adjustment and countermeasures, with 5G technology as the medium to strengthen and improve network social behavior and ideological guidance effect of ideological and political education, research 5G network interconnection virtual space within the development direction of ideological and political education, so as to realize the technology focus, technology practice to technology research, in the problem level, methods and application level expand network ideological and political education technology vision.

4.2. Explore the interdisciplinary research paradigm of network ideological and political education and Internet technology

Network ideological and political education of interdisciplinary is with big data, algorithms and other Internet technology shallow theory superposition, the ideological and political education under the background of specific technology of connotation change and extension lack of in-depth study, easy to ignore the network ideological and political education technology unique theoretical advantages and practical advantages. Therefore, we need to explore the paradigm of interdisciplinary research of network ideological and political education and 5G technology under the background of The Times, so as to provide new research ideas for its interdisciplinary innovation and disciplinary development.
4.3. Study the open development of the 5G background around the basic theory of network ideological and political education

From one-way information output web 1.0 to "read" web 2.0, from 2G mobile Internet technology to "all interconnected" 5G technology, the network ideological and political education research development with the Internet technology upgrade rich, in the basic theory problem initially formed a certain systematic, scientific theory system, makes the field research gradually clear subject, the development of hierarchy. Therefore, to study the development trend of network ideological and political education in the 5G era characterized by "super-fast" information transmission, it is necessary to expand the basic theory with practical problems and promote the open development of subject theory with the unified research principle of "theory and practice".

5. Study Pathways and Methods

Looking back at the key periods of historical development, each industrial revolution has greatly liberated the social productive forces. It can be said that seizing the technological opportunities of the fourth industrial Revolution is of great significance to realizing the great rejuvenation of the Chinese nation. Mission in the shoulder, dare not moment slack, every ideological and political education practitioners should grasp the opportunity to try under the new era background of the "era", try to marxist theory as the fundamental guidance, combined with the ideological and political education, psychology, computer science and other comprehensive interdisciplinary research, open vision, breakthrough discipline barriers, promote research resources integration, and in the 5G technology research and application results on the basis of exploring the development direction of ideological and political education. However, it must be admitted that the 5G technology network under the ideological and political education innovation development, must face certain realistic difficulties, namely 5G technology application development is not fully limit the practice of the subject: it is generally believed that 5G era will be in terms of Internet access speed, VR content implementation and Internet of things bring revolutionary change, will profoundly affect all aspects of social life, at present, 5G technology development to commercial stage only a few years ago, its application development is just started, need time to show the technical advantage. Therefore, as an interdisciplinary subject of 5G technology and network ideological and political education, the realistic development of 5G technology limits the realistic basis of the topic to a certain extent. To solve this problem, we can start from the following aspects:

First, consolidate the theoretical basis for researchers: researchers need to extensively read the ideological and political education research works at home and abroad, and take the core characteristics of 5G technology, the application trend and the basic theory of network ideological and political education as the logical starting point and research premise of scientific research;

Second, seek interdisciplinary research innovation: to ideological and political education, psychology and other related disciplines of technology on the development of the society, in-depth research of 5G technology of the future development characteristics and application direction, seek 5G under the background of the network of ideological and political education may have innovation and breakthrough point, form the corresponding theoretical advantage and practical advantages;

Third, practice research for the gripper: in view of the theoretical innovation design research, research object can cover college students, education teachers, university information builders, 5G technology application enterprises, etc., and through the summary of the research results of ideological and political education reality demand, analysis of the nature of 5G technology, to find 5G technology in the field of ideological and political education of theory and practice of innovative changes.

It is worth noting that the above research path and research points are not a linear exploration
process in time, but alternating development and mutual complement: among them, "practical research" is the premise and basis of the theoretical results and practical practice, through the scientific research process; while "consolidating theoretical foundation" and "seeking innovation research" should be conducted alternately and complement each other, so as to guide theoretical research and practical research to correct theoretical research. The specific research process should adhere to the unified principle of stage and continuity to ensure that our scientific research conforms to the actual needs and development law.

The path indicates the way, and the method provides the grasp. In the process of carrying out a series of studies, it is also necessary to pay attention to the combination of theory and investigation, analysis and summary, and master the methods so as to maximize the research results. The possible methods are as follows:

Firstly, the literature research: this topic on the basis of the existing research using literature research, in China, wan fang network database for resources to learn the existing theoretical achievements, and combined with the characteristics of 5G technology and the practical experience of ideological education work in colleges and universities research 5G technology in the field of network ideological education influence.

Secondly, research and analysis method: by analyzing the application cases of 5G technology, 5G technology affects the education industry, focusing on the possible technical changes in the education field of universities; investigating students, ideological teachers and 5G technology practitioners, and analyzing the innovation demand of ideological education under the background of 5G.

Thirdly, analysis and comprehensive method: the previous works, scientific research results and various perceptual materials and practical experience formed in the research are used to form phased and hierarchical sub-results, and on this basis, comprehensive integration to form the overall research results of the project.

6. Conclusions

In short, in the face of 5G technology risks, challenges and opportunities, network ideological and political education research should conform to The Times, grasp the era, take the initiative to adapt to the era change and with scientific attitude, explore and informatics communication in the field of interdisciplinary innovation around the network ideological and political education of the pursuit of the deepening development of the overall innovation.

References