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Research on the Cultivation of University Students' Network Literacy in the New Era: A Study Based on XX University

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Abstract: In the new era, the advancement of networked society and the development of internet users are mutually reinforcing. As the backbone of China's internet population, the network literacy of contemporary university students not only relates to personal self-improvement and comprehensive development, but also impacts the construction of a cyberspace power strategy, national prosperity and stability, and the realization of the great rejuvenation of the Chinese nation. From the perspective of ideological and political education, this study investigates the cultivation of network literacy among university students through a survey conducted at XX University. A questionnaire was designed across three dimensions: basic network usage patterns, evaluation of online content and information, and cybersecurity awareness with self-protection mechanisms. The findings reveal three urgent issues: inadequate effectiveness of current network literacy education, prevalent internet addiction among students, and moral anomie in cyberspace. Based on these findings, the study analyzes root causes and proposes contextualized cultivation approaches to maximize the effectiveness of network literacy education in the digital age.

Keywords: new era; university students; network literacy

1. Introduction

With the rapid popularization of 5G networks and increasing complexity of online information, university students — as primary participants in cyberspace activities during their formative values development stage — require strengthened network literacy education. Enhancing their ability to discern digital information and maintain rational engagement is crucial for building a socialist cyberspace power.

1.1. Research Status

The new generation of college students, as the “net generation”, is a generation closely connected with the new culture and new social status generated by the Internet connection and human information revolution, and is a generation that derives all kinds of life forms, cultural forms and value forms from the Internet, and the level of their network literacy not only affects their own healthy and comprehensive development, but also has a bearing on the construction and development of a strong network country. Their high or low Internet literacy not only affects their own healthy and comprehensive development, but also relates to the construction and development of a strong Internet country [1].

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Therefore, in order to better study the current situation of network literacy of college students in China, the author searched Chinese databases separately, searching for “college students' network literacy” in the database, and got the results of a total of 730 pieces of Chinese literature published from 2004 to October 2023, among which, 437 pieces of journal articles and 38 pieces of master and doctoral dissertations are related to it. Among them, there are 437 journal articles and 38 master and doctoral dissertations.

1.1.1 Current Status of Foreign Research

Foreign countries started to study network literacy earlier, and have formed rich research results, most of which are based on the analysis of media literacy as a research perspective, mainly focusing on the following points to carry out research.

1) Research on the connotation and composition of network literacy

The concept of “network literacy” was formally put forward by American scholar C.R. McClure in 1994, on the basis of which experts and scholars have elaborated on its concept and composition accordingly.

2) Research on the Path of Network Literacy Cultivation

First of all, foreign policies allow audiences to enhance the level of network literacy through actual network experience; secondly, researchers are still actively looking for ways to enhance network literacy suitable for audiences; lastly, publicity and guidance are strengthened, and more attention is also paid to the study of practical activities for network literacy cultivation, combining network literacy education with the curriculum of various majors, and carrying out a multi-channel, multi-angle and multi-level education mode to achieve better cultivation effects [2].

1.1.2 Status of Domestic Research

Domestic scholars have done a lot of theoretical research work on college students' network literacy, the earliest summarized the connotation of media literacy education, and the study of network literacy also comes from media literacy, and the relevant research results on network literacy are also becoming more and more perfect.

It has the ability to use network information resources. After that, there are two tendencies for domestic scholars to define the connotation of network literacy, one of which takes media literacy as the basis to examine the concept of network literacy; the other takes network literacy as an independent concept to be studied. There are mainly two perspectives on defining the composition of network literacy:

One is the perspective of requirements and levels from low to high. Firstly, it is the literacy of network technology, self-protection and critical thinking, the network quality and ethical norms that should be possessed in touching the network, and it is the specific embodiment of personal quality in the process of network practice; secondly, it is the comprehensive ability to obtain and disseminate network information under the laws and regulations, and to have a higher level of network security and technology, and to have a comprehensive ability to act ethically and be aware of social responsibility as embodied in it; and lastly, it is the sum of information technology, ideology and culture, and the mental. Finally, it is the sum of information technology, ideology and culture and mental ability, and it is the comprehensive quality that promotes one's comprehensive development and serves for the development of the society [3].

Secondly, the perspective is based on the level of basic knowledge and utilization skills. Firstly, it is the comprehensive ability to understand the network knowledge and utilize the network correctly, effectively and rationally to serve one's comprehensive development. Secondly, it is the media literacy of the audience in the network environment.

1) Research on the cultivation of college students' network literacy

First of all, research on the necessity of cultivating college students' network literacy. Cultivating network literacy is an objective requirement to regulate the network behavior of college students and provide correct value guidance for them. At present, the network

ideological field is facing risks, and the frequency of network illegal behaviors is very high, so there is an urgent need to cultivate college students' network literacy.

Secondly, research on the method of cultivating college students' network literacy. First, it is a research on the principle of cultivating college students' network literacy. There are several basic principles, such as school and self-education, online and offline education, content and form, rigidity and flexibility, unification of "breaking" and "establishing", systematic and practical. Secondly, it is about the research on the cultivation path of college students' network literacy. Some scholars believe that the network literacy of college students in the post-epidemic era should be strengthened through the construction of a network literacy cultivation platform and other cultivation strategies. Some scholars believe that college students can be cultivated through the joint efforts of the "Great Moral Education" system; or build a curriculum system for cultivating network literacy and establish a perfect network supervision system [4].

2) Research on the Status and Reasons for the Cultivation of College Students' Network Literacy

First of all, research on the status quo of college students' network literacy cultivation. Academics mostly analyze it from the perspective of college students themselves, and the same viewpoint was shared that the lack of network literacy education has caused college students to have problems at the physiological, psychological, ethical, legal and other levels, which need to be paid attention to and solved urgently.

Secondly, the research on the reasons for the insufficient cultivation of college students' network literacy. One of the important reasons is the neglect of the negative impact of the network and the lack of network literacy education.

1.1.3 Research Review

Foreign countries have more comprehensive and in-depth research on network literacy, especially in the cultivation of students' network literacy and the way, network literacy theory level, due to the differences in the use of the Internet at home and abroad, we need to cultivate the network literacy of college students on the basis of their own country's national conditions, and we should also draw on relevant foreign research theories accordingly.

Domestic research on network literacy and cultivation has been carried out in various aspects, but ① the research results lack of systematic, the definition of the concept of "network literacy" needs to continue in-depth research; ② the research results on the new era of college student groups are relatively small; ③ the cultivation of college students' network literacy from the ideological and political education has been rarely mentioned and needs to be improved.

2. Analysis of the Results of the Survey on the Current Situation of College Students' Network Literacy

The development of the new era of economic and social development, so that the network environment in colleges and universities can continue to optimize their own, the network has become an important part of the daily life of college students, college students can use the network at any time and any place, to solve problems through the network pathway [5]. Therefore, the author of the new era of college students to carry out a survey on the status of college students' network use. The survey questionnaire mainly includes three parts: the basic situation of network use, network content and information evaluation, and network security and self-protection of college students in the new era. The target of this survey is college students studying in colleges and universities, a total of 1300 questionnaires were issued, 1250 questionnaires were returned, the return rate of the questionnaire was 96.15%, and 1050 valid questionnaires were returned, accounting for 84.00% of the total number of returned questionnaires. The questionnaire survey analyzes and researches the status quo of college students' network literacy in the new era,

and makes a good basic analysis for exploring the path afterwards, so as to facilitate the targeted solution path. At the stage of survey statistics and analysis, SPSS software is used for final data processing [6].

2.1. Survey and Analysis of the Current Situation of the Basic Situation of College Students' Network Use

College students' network literacy is an important part of college students' comprehensive literacy. In the face of today's complex domestic and international network environment, the new era of college students should have the ability to skillfully use computer and network-related knowledge, the ability to rationally deal with network information, the ability to use information to solve problems, and at the same time, be familiar with information security, ethical and moral norms, and relevant laws and regulations, with self-management, discipline and protection of literacy, and ultimately, to form a sense of social responsibility and awareness of moral norms in the network learning. Finally, a sense of social responsibility and ethical norms should be formed in online learning. Therefore, the relevant abilities of new-age college students were evaluated [7].

From "systematic learning and complete proficiency" to "very poor", new-age college students' self-assessment of their Internet skills is good, and the survey results show that new-age college students can basically master some basic Internet skills, have a high degree of mastery, or have passed the systematic study. The survey results show that new age college students have a basic mastery of some basic network skills, a high degree of mastery, or through systematic learning, or can be skillfully used, these contents may be involved in the university information technology classes, due to the usual use of computers to write articles and consult information, communication and resource sharing is more, while the multimedia production and processing, animation and information processing, web page design opportunities are less [8].

In their daily Internet use behavior, 64.48% of the college students occasionally use the "advanced search" function in search engines or databases, while 11.24% of the college students frequently use it. In addition, the ability to understand information on the Internet is also an important part of Internet literacy. According to the survey data, 61.24% of the college students think that their comprehension of network information is good. To summarize, the overall level of new age college students is good in terms of the accuracy of information selection [9]. Meanwhile, the chi-square test shows among the surveyed college students that there is a significant difference between male and female college students regarding the main purpose of surfing the Internet. Among them, more female students than male students use WeChat and QQ for communication and online shopping, and more male students use the Internet to learn about news and current events, and more than female students for study and information access, entertainment and leisure.

Regarding the ways to solve the problems encountered in learning in the network, college students' choices are: 35.43% through the "network and teachers, classmates," 35.43%; through the "search engine" to search for answers, 32.95%; through the "professional learning website" to search for answers, 32.95%; through the "professional learning website" to search for answers, 32.95%; and through the "professional learning website" to search for answers, 32.95%. 17.71% through "professional learning websites"; 6% through "academic journals" and 6% through "downloading and watching related online videos", and only 1.14% of college students will choose "posting for help". Only 1.14% of college students will choose "posting for help", and 0.76% of college students will choose other ways. The chi-square test shows that more male students than female students seek help through posting. The above data shows that in terms of information acquisition channels, new generation college students use WeChat, Weibo and Shake Voice most frequently, but do not use portals, posting bars and forums to acquire information. Therefore, it shows that college students usually obtain information passively in online interactions or forwarded by their circle of friends. In addition, 63.14% of the college students chose to

use search engines to obtain study information; 55.9% chose to use search engines mainly with library resources; followed by library databases (54.38%), official government websites, comprehensive service websites (45.81%), library resources mainly with search engines (41.24%), posting bars and forums (39.33%), and other websites (39.33%). forums (39.33%), and microblogs of relevant experts and scholars (36.48%). This shows that new generation college students are able to sift out the correct information from the Internet.

2.2. Survey and Analysis of the Current Situation of Internet Content and Information Evaluation Among College Students

Regarding the contact and use of the network, new age college students hold an open and positive acceptance attitude, they generally recognize the importance of the network in their lives, acknowledge the network as a tool and medium, and also acknowledge the importance of learning information technology.

In view of the fact that network literacy refers to screening, analyzing, understanding and evaluating network information, and having a certain discursive reaction ability to network information, and creating and producing network information on this basis, the survey was designed with the following questions: "Do you think the authenticity of the network information", "How do you make use of the information searched", "Do you use the information searched? information", 'whether you can think independently about hot issues on the Internet', 'whether you can correctly use protection software to prevent the infringement of undesirable information' and a series of other questions, to investigate the new era of college students can have their own discernment ability in the vast amount of information on the Internet, through analyzing and analyzing the information on the Internet. By analyzing the data, we can lay the foundation for the next cultivation path.

In the survey of college students' views on the importance of the Internet, it was found that 47.24% of the college students basically agreed with the view that "the Internet is an important way to seek solutions to problems", and another 31.71% agreed with this view. It should be said that college students are rational in their evaluation of the importance of the Internet. Moreover, 61.71% of the college students think that the information on the Internet is half-true or half-false, 39.14% of the college students can express their opinions according to their own understanding when they use the information on the Internet, and 27.14% of the college students can flexibly utilize the information searched for their own needs, which shows that college students of the new era can distinguish the truthfulness of the information on the Internet.

Nearly 40% of the new-age college students basically agree with the viewpoints of "having independent thinking on hot issues on the Internet" and "being able to use protection software to prevent the infringement of undesirable information", and 68.00% of the college students are able to recognize the truth first. 68.00% of the college students are able to recognize the truth first as their first choice. In addition, the chi-square test (Table 1) shows that male students are slightly more capable than female students in independent thinking and recognizing right and wrong. The fact that college students are able to hold a cautious attitude towards online information shows that college students are more mature in the way of dealing with information, and in this way, they are able to form a kind of attitude and consciousness of rational judgment, independent thinking, and not following blindly towards online information.

Table 1. Cross-sectional (chi-square) analysis results of independent thinking on hot online issues.

TITLE	NAME	SEX: (%)		TOTAL	χ^2	p
		WOMAN	MAN			
Independent thinking on topical issues on the web	disagree	18 (2.99)	13 (2.91)	31 (2.95)	8.167	0.086
	agree	221 (36.65)	144 (32.21)	365 (34.76)		

basic agreement	239 (39.64)	178 (39.82)	417 (39.71)
Completely disagree.	2 (0.33)	8 (1.79)	10 (0.95)
totally agree	123 (20.40)	104 (23.27)	227 (21.62)
TOTAL	603	447	1050

* $p < 0.05$ ** $p < 0.01$.

Note: P is a determination of whether X produces a difference in Y. A P value of less than 0.05 or 0.01 indicates a difference.

At the same time, college students can clearly recognize the influence of the Internet on real life, 80.57% of college students think that expressing opinions and comments on the Internet can help to solve real life problems, reflecting that new age college students have a high degree of participation in the Internet and a high degree of enthusiasm in expressing themselves on the Internet. Through the data analysis, it is concluded that the new era college students are more active in participating in the network, and for the cognitive situation of the concept of “network literacy”, 53.62% of the college students are basically aware of this concept, and for the manifestation of network literacy not only stay in the form of it is a kind of use of network information technology, the ability to identify and filter information, the ability to master and understand the relevant network information, and the ability to use the network information technology. The expression of network literacy is not only limited to the ability to use network information technology, identify and filter information, and understand relevant network laws and regulations and other technical knowledge, but also embodies more in the comprehensive literacy, rational treatment of network information, and the sense of social responsibility and ethical norms embodied in the behavior of the network.

However, only 21.71% of the college students have a very good understanding of network literacy, 22.00% have some understanding, and 2.67% have no understanding of network literacy at all. The fact that college students have some understanding and no understanding of network literacy reminds colleges and universities of the importance of strengthening the cultivation of network literacy. In addition, only 44.67% of college students have participated in network literacy classes, and network literacy-related competitions, contests, seminars, etc., are few and far between, reflecting the lack of network literacy classes in colleges and universities and the inadequacy of educational content.

3. Implementation Path of Cultivating College Students' Network Literacy in the New Era

Although the concept of network literacy has not yet been clearly outlined, the network literacy of college students is in urgent need of improvement, and all parties in society must cooperate to jointly expand the educational position of college students' network literacy. For the education of college students' network literacy, home, school and society should pay attention to the importance of improving the construction of college students' network literacy methods and contents.

3.1. Optimizing the Role of Social Environment in the Cultivation of Network Literacy

First of all, it is necessary to create a social environment conducive to the cultivation of college students' network literacy. In the new era, China's position in the world economy is becoming more and more important, the information industry is an important part of the socialist construction, and the learning life of college students is closely related to the network. Socialist construction and social harmony and stability have a direct relationship with the level of network literacy of college students. Only with a certain level of

network literacy can they continuously respond to the needs of economic and social development and make contributions to socialist construction and social harmony and stability.

Secondly, formulate and improve policies related to the cultivation of college students' network literacy. Although cyberspace is virtual and intangible, it is by no means a purely virtual space, and cybersociety also needs the legal and moral norms required by the real society to be managed and restrained. In the process of growth and development of college students, as long as the establishment of correct scientific values, in order to better enhance their own development. College students should be guided to establish a correct view of network security and self-prevention awareness, both online and offline to maintain consistency in words and deeds, to form a good network literacy. In the new era, let college students clearly realize that in the network society, they need to consciously regulate their own network behavior, enhance their moral norms and social responsibility consciousness, and strictly abide by the network order.

Finally, the mass media should reasonably play the function of public opinion guidance. In the field of ideology, we should deeply understand the importance of public opinion guidance, take the initiative to strengthen the work of public opinion guidance, and rely on the power of Marxist truth rather than administrative and legal means to resolve general controversies and ambiguous understandings. The truth should be used to expose the lies and let science overcome the fallacies. Therefore, we should always adhere to the guiding position of Marxism, use the Party's innovative theories to occupy the commanding heights in cyberspace, adhere to the correct political direction, public opinion and value orientation, fight against all kinds of erroneous thinking, constantly consolidate the ideological high ground of the network, promote the construction of network civilization, strengthen network ecological governance, disseminate a positive and healthy network culture, and firmly grasp the right to speak on ideological work, so as to practically safeguard network ideological security and political security, and provide a powerful ideological weapon for economic development and social progress.

3.2. Playing the Leading Role of Colleges and Universities in Cultivating Network Literacy

Through the author's investigation and research, it is found that the cognitive ability of new-age college students to network literacy, the awareness of network moral norms, and the ability of self-restraint and management of network behaviors are all greatly deficient. Therefore, one of the ways to promote the cultivation of network literacy is to give full play to the role of ideological and political theory classes as the main channel in the cultivation of network literacy.

First, enrich the content of college students' network literacy education. Including the opening of network literacy education courses, increasing network literacy theory research, optimizing network literacy teaching form three aspects, but also to strengthen the new era of college students' Marxist theory and ideological and political education system education and socialist core value system education.

New-age college students master network knowledge and technology mainly through self-study and communication with teachers, classmates and friends, while the education in colleges and universities is relatively lacking. In this regard, colleges and universities can, according to the different majors and semesters of college students, incorporate the education of network literacy into the regular curriculum system through the main channel of ideological and political theory courses — the opening of public compulsory courses. At the same time, it is also necessary to continuously innovate the form of network literacy teaching materials. In terms of content, only by strengthening and enriching the education of college students in Marxist philosophy can college students establish a scientific worldview and methodology in the process of learning, and flexibly use Marxist theory in order to form a network worldview that correctly and objectively analyzes and understands the cognitive network information, and consciously regulates

their network behavior. With the foundation of Marxist philosophical theories, and then in-depth strengthening of the socialist core value system education, in order to promote quality education from the inside out, improve the network literacy of college students.

Secondly, create a healthy campus network environment. This includes improving the ideological and political education website and strengthening campus network management.

New age college students are more concerned about current affairs, the development of the country and society, and have a distinctive attitude towards things and people, so they pay more attention to these contents on the Internet, and when the relevant contents are missing, they tend to receive and adopt information obtained from other ways. For this characteristic of college students, it is necessary to further establish and improve the ideological and political education website of colleges and universities, and take the initiative to occupy the ideological and political education position on the Internet. Adopting the forms and contents that college students like to see and enjoy, open online party class, group class, etc., which is convenient for college students to find and download the relevant information content of ideological education; open online psychological counseling platform, always pay attention to the mental health of college students; strengthen the attention to campus hotspots, digging into the campus news, and publicize the campus on the "epidemic", "volunteers" and so on. The university has also strengthened its focus on campus hotspots, dug into campus news, publicized good deeds such as "anti-epidemic" and "volunteers" on campus, and provided role model education.

At the same time, the information management centers of universities should strengthen their management in blocking bad websites, real-name Internet access, and especially in network access time. They should formulate rules and codes of conduct for network use and strengthen the management of LAN and campus network, so as to regulate the network behavior of college students. In addition, colleges and universities should always keep researching online public opinion, do a good job of analyzing online public opinion, and form a corresponding mechanism for collecting, researching, and responding to online public opinion, so as to dissolve potential conflicts and hidden dangers and solve practical problems. At the same time, it is necessary to strengthen the construction of "firewalls" and "filters" to block and shield undesirable information on the Internet in a timely manner, so as to build a safe and healthy network environment for college students.

Once again, the construction of high-quality network literacy faculty. In the network environment, the status of the educator and the educated has changed, and the main position of college students is increasing. In the face of the epidemic, the new era of college students stop classes and do not stop studying, then as the educators of the main body of the network literacy cultivation, moral education, as a teacher, to build a network literacy of teachers with high quality, so that they can give full play to the role of the main channel of ideological and political education. The educators' knowledge level, network moral literacy and network communication ability have a direct impact on the relative ability of college students.

In the face of the new situation, colleges and universities should gradually improve the network literacy of their faculty in order to adapt to the continuous development of education in the new era. In order to realize this goal, it is necessary to continuously enrich and expand the faculty of network literacy education by absorbing and introducing technicians with high network application skills and network literacy, and at the same time, in order to improve the network application ability and comprehensive literacy of the faculty, it is possible to arrange and implement the teacher training program, provide corresponding long, medium and short-term training courses, and also through the exchange of teachers in the process of network literacy cultivation. Through the exchange of problems and difficulties arising in the process of network literacy cultivation by teachers, new ideas, new forms and new methods of network literacy cultivation can be innovated with the times. In addition, a network literacy training team composed of full-time teachers of

network literacy education, teachers of ideological and political theory courses, or student cadres with high network literacy has been specially set up to enable them to train students in network literacy through the “Nail”, “Learning”, and “Tencent Conference” programs. “Tencent Conference”, etc., to educate new-age college students about network literacy.

Finally, network literacy is publicized through student associations. Student associations in colleges and universities are an important part of campus culture, and are an indispensable part of guiding and organizing students to improve their network literacy. Through the carrier of student associations, the new era of college students in colleges and universities are widely publicized, and in the form of competition for learning, the purpose is to promote college students to form network innovation, and ultimately realize self-worth, and at the same time, to carry out activities such as network skills competitions, network knowledge contests, web page software production contests, network self-protection contests, etc., in order to encourage active participation of the students at the same time to guide them to actively learn about the network knowledge, and to enhance their ability to identify and understand the network information. At the same time, activities such as network knowledge contests, webpage software production contests, network self-protection contests, etc. are carried out to encourage students to actively participate, guide them to learn network knowledge, enhance their ability to identify and understand network information, improve their network literacy, and learn to use the network in a civilized and healthy way, so as to achieve twice the result with half the effort.

For young students, the role of role models around them is huge, and full attention should be paid to let students lead by example. Therefore, while focusing on the cultivation of college students' network literacy, colleges and universities also pay attention to successful professionals, and promote college students to improve their network literacy and cultivate the sense of network innovation by the power of role models through the personal accounts of professionals.

3.3. Improve Self-Education to Form Conscious Network Literacy

New-age college students should combine self-education with the cultivation of society, colleges and universities, and families, so that the cultivation of network literacy can achieve twice the result with half the effort. College students are in the golden period of learning, they should fully combine the theoretical knowledge of network literacy cultivation with practice, and in the process of touching the Internet, they can demonstrate the comprehensive literacy of new age college students by using civilized network language and standardized moral behavior.

First of all, establish a correct view of network security. College students in the new era are a generation growing up with economic globalization, information networking, comprehensive deepening of reform, and the goal of “Two Hundred Years”. They should firmly establish the consciousness of the main body and responsibility of safeguarding national security, enhance the ability to prevent all kinds of risks, emphasize the symbiosis and win-win situation of personal security and national security, and strengthen the awareness of college students on the responsibility and responsibility of safeguarding national security. College students' cognition of the responsibility and obligation to safeguard national security.

First, we should establish a correct awareness of network security prevention. Survey data show that the new era of college students are spending more and more time on the Internet every day, and are exposed to a wider and wider range of networks, and it is very easy to confuse beneficial and undesirable information. College students should set up a strong sense of network security, timely antivirus and Trojan horse virus checking on computers, and have a profound grasp of their own words, deeds, and ideological activities, and calmly respond to them, and promptly analyze and reflect on them. Network security has a strong hidden nature, only at all times vigilant, in order to maximize their

personal and property safety from being violated, in order to further maintain the health and stability of the Internet.

Secondly, it is necessary to establish a correct sense of network patriotism. The network sovereignty of the country needs to be jointly maintained by college students in the new era. Through the Internet and cell phones and other media, always understand the current basic situation in the world, clear about all kinds of challenges faced by our country in the field of the Internet, enhance their own sense of network patriotism, and make clear their own responsibility for network security. In the process of surfing the Internet, do not publish remarks harmful to the country and the people, dare to fight against wrong remarks, and make their own contribution to the defense of China's network sovereignty.

Third, we should establish a correct view of network law. New-age college students should have a clear understanding of network morality and network requirements and their norms, and acquire relevant legal knowledge by reading relevant legal books, participating in various thematic activities, and watching legal trial programs. At the same time, in the process of surfing the Internet must understand and comply with the "Network Security Law of the People's Republic of China" and other laws and regulations, to have a legal awareness and legal bottom line, and be able to consciously and strictly regulate their own network behavior. At the same time, they should also learn to safeguard their legitimate rights and interests, know how to protect themselves in the network, and surf the Internet in a healthy, scientific and reasonable manner.

3.4. Emphasizing the Fundamental Role of Family Education in the Cultivation of Cyber Literacy

Families should first pay attention to network literacy education. Parents should educate and guide their children to use the Internet correctly, so that they can gain access to correct online learning instead of being satisfied with pure entertainment activities such as online games and swiping short videos. In addition, it is also necessary to give full play to the positive effects of improving Internet literacy on children's growth, strengthen the supervision of the frequency of Internet activities, browsing content, etc., to prevent the phenomenon of "Internet addiction", effectively resolve the negative impact of the Internet, and "keep a good watch" over children's access to the Internet, to enhance their integration into the real world and to enhance their understanding of the real world, as well as to enhance their understanding of the Internet. To enhance the children's integration into the real society and identification with family life, and to better acquire and improve Internet literacy.

Secondly, parents should improve their own Internet literacy. Parents should learn and understand the Internet through self-learning and self-education, improve their own Internet literacy, and guide their children to improve their Internet literacy and make good use of the Internet by word and example. They should establish open and friendly communication with their children on Internet issues, and by negotiating with their children on the length of Internet access and establishing rules for Internet use, they can not only respect their children's opinions, but also help them to develop self-control and self-management abilities.

4. Conclusion

In the new era, the development of network is exceptionally rapid and deep from the point of view of speed and breadth, and the network has penetrated into all corners of people's lives. The upgrading of software and the updating of hardware have facilitated the dissemination and integration of network information, brought convenience to people's lives, and to a certain extent contributed to the change of the social structure, and also changed people's ideological awareness and behavioral habits in a subtle way.

During the research period, the domestic and international network environment situation is grim, network information technology continues to progress and develop, and

the scope of application is more extended. Combined with the current situation of network literacy of college students in the new era explored in this paper, we hope to explore the cultivation path to meet the requirements of the times and the rapid development of the network, and we hope that through the society, colleges and universities, families, and college students' self-education to cultivate their network literacy, correctly guide college students of the new era to use the network technology in an orderly manner, and rationally utilize the network resources according to the law, scientifically and effectively, so that the positive role and value of the network can be realized to the fullest. Realize the maximization of the positive role and value of the network. Strengthen the comprehensive development of network literacy of college students in the new era, and better improve the work of ideological and political education in the new era.

References

1. S. S. Jabeen and F. Ahmad, "Digital citizenship: Effective use of digital media," *EDULEARN21 Proc.*, 2021, doi: 10.21125/edulearn.2021.1220.
2. N. Li, "Research on the cultivation of college students' innovation ability," *Adv. Educ. Technol. Psychol.*, vol. 7, no. 16, pp. 92-97, 2023, doi: 10.1051/shsconf/202316601024.
3. R. Sharma, et al., "Digital literacy and knowledge societies: A grounded theory investigation of sustainable development," *Tel-ecom. Policy*, vol. 40, no. 7, pp. 628-643, 2016, doi: 10.1016/j.telpol.2016.05.003.
4. T. Jin, "Design and Application of Comprehensive Evaluation System of College Students' Network Literacy," *2021 6th International Conference on Smart Grid and Electrical Automation (ICSGEA)*, Kunming, China, 2021, pp. 86-91, doi: 10.1109/ICSGEA53208.2021.00025.
5. Y. Jiang, et al., "Research on the principles of network ethics education for college students," in *Proc. 2019 Int. Conf. Contemp. Educ. Soc. Dev. (ICCESD 2019)*, Atlantis Press, 2019, doi: 10.2991/icesd-19.2019.24.
6. Y. Wang, "Study on the communication of ideological and political education in colleges and universities," in *Proc. 3rd Int. Conf. Contemp. Educ. Soc. Sci. Humanit. (ICCESSH 2018)*, Atlantis Press, 2018, doi: 10.2991/icesh-18.2018.110.
7. F. Ma, "Youth education and social development in China," *Rozv. Met. Upravl. ta Gosp. na Transporti*, no. 2 (71), pp. 82-89, 2020, doi: 10.31375/2226-1915-2020-2-82-89.
8. Y. Wu and Z. Rajnai, "5G Standardisation: case study in China," *2024 IEEE 22nd World Symposium on Applied Machine Intelligence and Informatics (SAMI)*, Stará Lesná, Slovakia, 2024, pp. 000133-000138, doi: 10.1109/SAMI60510.2024.10432870.
9. J. Xu, A. Zhang, and Q. Chen, "Internet development, population aging and urban-rural income gap: An empirical analysis based on provinces in China," *Adv. Manag. Appl. Econ.*, vol. 14, no. 5, pp. 1-3, 2024, doi: 10.47260/amae/1453.

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