

Research on the Cultivation Mechanism of College Students' Internet Literacy from the Perspective of Artificial Intelligence

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ABSTRACT

With the wide application of artificial intelligence technology in the network environment, the cultivation of college students' network literacy is facing new opportunities and challenges. This paper deeply analyzes the connotation and current situation of college students' network literacy from the perspective of artificial intelligence, and constructs a network literacy cultivation mechanism for college students from multiple dimensions such as educational guidance, technical support, and practical exercise, aiming to improve the ability of college students to adapt to the network environment in the era of artificial intelligence and promote their all-round development.

KEYWORDS

artificial intelligence; University student; cyberliteracy; Cultivation Mechanism

1 Introduction

In the era of artificial intelligence, the Internet has been deeply integrated into all aspects of college students' learning, life and social interaction. The emergence of AI-driven web applications, such as intelligent recommendation systems and virtual assistants, has changed the way information is disseminated and obtained. In this context, cultivating college students with good network literacy has become an important task of college education. Internet literacy is not only related to the identification and use of online information by college students, but also affects their value shaping and behavior patterns. It is of great practical significance to construct a scientific and effective network literacy cultivation mechanism for college students to guide them to make rational use of network resources and avoid network risks. College students are the darlings of the digital age and the creators and main force of the digital world. The digital age a new era for human beings to move towards digital civilization. It is undeniable that digital technology, with its rich data types and new data technology, has promoted the rapid of digital literacy education in colleges and universities. It is not only conducive to the transformation of the concept of digital literacy education in colleges and universities, further improving the effectiveness digital literacy education in colleges and universities, providing college students with intelligent digital tools and digital platforms, but also conducive to stimulating college students' enthusiasm for participating in the cultivation digital literacy. However, due to the "digital information cocoon" obscuring college students' scientific understanding of digital literacy, the "digital ideological risk" dissolving moral norms of college students' digital literacy, and the "digital divide" causing the cultivation of college students' digital literacy to be entertainment-oriented, it not only ethical dilemmas and other problems to college students' digital literacy, but also brings many practical challenges to the digital literacy education in colleges and universities.

2 The connotation of college students' network literacy from the perspective of artificial intelligence

(1) Information screening literacy With the emergence of a large number of artificial intelligence-generated content (AIGC), college students need to have the ability to screen the authenticity of information and the reliability of the source. It is necessary to be able to identify fake news and AI-synthesized false information, and distinguish between machine-generated content and human-generated content to avoid being misled. For example, in the face of AI-generated pictures or video news that seem to be real, college students need to judge the authenticity by analyzing the details and looking at the source.

(2) Technology application literacy College students should master the basic knowledge of artificial intelligence technology and understand its application principles and scenarios in the network. For example, they are familiar with the intelligent algorithms of search engines, can use intelligent tools to assist learning and research, use AI writing tools to improve writing efficiency but do not rely on it, and have a certain degree of technical critical thinking to think about the pros and cons of technology application.

(3) Online social networking and moral literacy At a time when virtual social networking is increasingly relying on artificial intelligence technology, college students should follow the norms of online social networking and respect the privacy and rights of others. For example, when using an intelligent chatbot, be polite; On virtual social platforms, do not

disseminate bad information and maintain a healthy online social ecology.

(4) Cyber security literacy With the intellectualization of cyber attack methods, college students need to enhance their awareness of cyber security. Understand the cyber security risks under AI technology, such as AI-driven cyber fraud and data breach risks, and master basic security protection skills, such as setting strong passwords and clicking on links carefully.

3 Analysis of the current situation of college students' Internet literacy

(1) Insufficient information screening ability

According to the survey, more than 60% of college students have difficulty accurately identifying AI-generated false information. Some college students are easily attracted by exaggerated and emotional AI push content on the Internet, and lack the awareness of in-depth thinking and verification of information. For example, in some hot events, AI-generated rumors can quickly spread among college students, reflecting that their information screening ability needs to be improved.

(2) Dependence and abuse of technology application

On the one hand, about 40% of college students rely excessively on intelligent search tools and lack the ability to think independently and explore knowledge. On the other hand, some students abuse AI writing tools to complete assignments, and their academic integrity is challenged. For example, in course paper writing, some students use AI to generate content with one click, lacking a deep understanding of knowledge and independent creation.

(3) Frequent problems in online social networking

Some college students show uncivilized behaviors in online social networking, such as online violence and malicious slander of others. At the same time, some college students are overly addicted to virtual socialization and ignore real-life interpersonal interactions. For example, some students use insulting language to attack their teammates in online games and disrupt the online social environment.

(4) Weak awareness of network security

Nearly 30% of college students have encountered online fraud or personal information leakage. Many students have limited knowledge of cyber security, and they are easy to fall into cyber security traps if they do not pay attention to protecting personal information in scenarios such as online transactions and logging in to public WiFi.

4 Construction of network literacy cultivation mechanism for college students from the perspective of artificial intelligence

(1) Technical support mechanism

Intelligent monitoring and early warning system: Colleges and universities use artificial intelligence technology to develop online behavior monitoring and early warning systems to monitor students' online behavior in real time. When it is found that students are browsing bad information or encountering the risk of online fraud, an early warning notice will be issued in time to remind students and teachers to intervene. Personalized learning platform: Based on artificial intelligence algorithms, build a personalized network literacy learning platform. According to students' learning situation and interest preferences, targeted learning resources are pushed, such as cyber security knowledge videos, information screening case analysis, etc., to meet students' personalized learning needs. Cyber Literacy Assessment Tool: Develop an AI-based cyber literacy assessment tool to comprehensively assess students' cyber literacy level through online tests and behavior analysis. Provide students with a detailed assessment report, pointing out the strengths and weaknesses, and providing reference for subsequent learning.

(2) Practical training mechanism

On-campus practice projects: Organize students to participate in on-campus network construction and management practice projects, such as campus website maintenance, network public opinion monitoring and analysis, etc. Let students apply the knowledge of network literacy in practice and improve their practical skills. For example, a student team is assigned to be responsible for the content review and release of the campus official account, so as to exercise their information screening and network communication skills. Off-campus internship and volunteer service: Students are encouraged to participate in off-campus network-related internship activities, such as internship in Internet enterprises and volunteer service for online public welfare projects. In internships and volunteer services, students will be exposed to the real network environment to enhance their sense of social responsibility and network literacy. For example, participate in the internship of network security enterprises and assist in the detection of network security vulnerabilities. Simulated network environment training: Set up a simulated network environment laboratory, set up simulated scenarios such as online fraud and information misleading, so that students can respond to training in a safe environment. Through

simulation practice, students can improve their cyber security prevention and information processing capabilities.

(3) Home-school coordination mechanism

Parent training and communication: Colleges and universities conduct online and offline network literacy training for parents to understand the characteristics and risks of the Internet in the era of artificial intelligence. Establish a home-school communication platform, regularly feedback students' online behavior performance to parents, and jointly pay attention to the development of students' online literacy. **Home network management guidance:** Guide parents to reasonably set up their home network environment, such as limiting the time spent online, filtering out bad information, and so on. Parents are encouraged to participate in online activities with their children, such as watching online open classes together, discussing hot online events, and guiding children to use the Internet correctly. **Home-school joint activities:** Organize home-school joint network literacy activities, such as parent-child network security knowledge competitions, family network civilization construction selection, etc., to enhance home-school cooperation and jointly promote the improvement of students' network literacy.

In the digital age, college students need to scientifically understand the essence, connotation, and characteristics of digital, correctly handle the relationship between individuals and data, society and data, and use Marxist standpoints, viewpoints, and methods to correctly understand and scientifically grasp the political economic, and cultural attributes of digital information. With the rapid development of emerging technologies such as artificial intelligence, big data, and cloud computing, college students should consciously filter save relevant information when using digital tools such as smartphones, office software, and search engines to collect, obtain, and retrieve information. They should use relevant tools and technologies reasonably classify and organize information in the complex data information, master the skills of using digital tools to query, screen, and collect relevant information, and continuously improve their ability understand, collect, obtain, and process digital information. The ability of data analysis, communication, identification, and evaluation Data analysis is the foundation and premise digital literacy training. Using digital tools to analyze and judge relevant data information, to go through the process of sifting and refining, to accurately grasp the relationship between different, and to master scientific data analysis methods are the basic skills that college students need to master in the digital age. At the same time, with digital tools as the, information is transmitted and resources are shared in data communication.

V. Conclusions From the perspective of artificial intelligence, the cultivation of college students' network literacy is a systematic project. By constructing a multi-dimensional cultivation mechanism such as educational guidance, technical support, practical exercise, and home-school collaboration, the network literacy level of college students can be effectively improved and adapted to the changes in the network environment in the era of artificial intelligence. Universities, families and society should work together to create a healthy cyberspace for college students and help them grow into talents with good cyber literacy in the new era. In the future, with the continuous development of artificial intelligence technology, the network literacy cultivation mechanism of college students needs to be continuously optimized and innovated to cope with new challenges and opportunities.

About the Author

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