Pacific International Journal, Vol. 8(3); 2025
ISSN (Print) 2663-8991, ISSN (Online) 2616-4825[1]
DOI:10.55014/pij.v8i3.822
https://rclss.com/index.php/pij

Research on College Students' Digital Literacy ——A Qualitative Analysis Based on Grounded Theory of H University

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Abstract: With the rapid development of the intelligent era, the iterative upgrading of artificial intelligence, large models and robots is accelerating, and the college students are facing many new challenges. As an indispensable key ability for college students to adapt to the intelligent era, the importance of digital literacy has become increasingly prominent. This paper fully draws on the previous rich research results in the field of media literacy, media and information literacy, and uses the research method of qualitative analysis to conduct in-depth analysis of the interview data of five groups of undergraduate groups by using grounded theory, and constructs a theoretical model of "acquisition evaluation participation". The research shows that there are differences in the operation proficiency and application depth of college students in the application of digital technology; In the process of information feedback, some students' sensitivity to information and processing ability need to be improved; When participating in public affairs, the enthusiasm and influence of different students are also uneven. Based on this, this paper puts forward targeted promotion strategies from the three levels of individual, school and society. It provides not only a solid theoretical basis and practical guidance for the cultivation of College Students' digital literacy, but also helps to promote the comprehensive development of college students in the intelligent era, and better adapt to and lead the development needs of the times.

Keywords: Digital Literacy,Qualitative Research,Group Interviews,Grounded Theory

Introduction

With the tide of digitalization sweeping the world, the domestic large model deepseek was born in 2025. Intelligent technology has penetrated into every corner of social life with unprecedented depth and breadth, and has profoundly changed people's way of life, learning and work. As the main participants in the intelligent era, college students' digital literacy level not only plays a decisive role in their own growth, development and future career planning, but also affects the progress and innovation of the whole society in the digital field at the macro level. Digital literacy, as a necessary comprehensive ability for individuals in the digital environment, is not only a traditional category of media literacy research, but also a kind of integration and Transcendence of media literacy[1], according to existing research[2],The media literacy of college students covers the skilled use of digital technology, the efficient acquisition and accurate evaluation of information, and the active and responsible participation in communication and creation in the digital space. Then, digital literacy can still be regarded as the inheritance of the above research dimensions.

It is not only the focus of education, but also the inevitable requirement of social development for the cultivation of high-quality talents to deeply analyze the current situation of College Students' digital literacy, accurately explore the existing problems and the influencing factors, and put forward practical promotion strategies. This study is based on five groups of representative interviews, combined with the cutting-edge research results of relevant doctoral theses, and uses grounded theory to carry out a systematic qualitative analysis. Through this in-depth exploration, it aims to comprehensively and carefully outline the real picture of College Students' digital literacy, and provide a solid foundation and strong support for subsequent theoretical research and practical improvement.

Literature Review

In 1994, after the Israeli scholar Yoram eshet alkalai proposed the concept of digital literacy, foreign countries, led by the European Union, including the United States, England and Australia, carried out measures in relevant fields from a national perspective to improve the digital literacy of their citizens, especially policy opinions.

"Digital literacy" appeared in the official document of Shanghai Jiading District Bureau of education as early as 2015 in China,[3]and then the Minister of education, Huai Jinpeng, expressed the importance of digital literacy in public on many occasions.[4]On April 27, 2025, the central office of cyberspace, the Ministry of education, the Ministry of industry and information technology, and the Ministry of human resources and Social Security jointly issued the key points for improving the digital literacy and skills of the whole people in 2025. The document

[Received 08 April 2025; Accepted 09 June 2025; Published (online) 20, June, 2025]

deploys 16 important tasks in 6 aspects. The first is to improve the digital talent cultivation system, including cultivating compound artificial intelligence talents, improving the high-level talent cultivation system, expanding the applied skilled talent team, and enhancing the digital work ability of workers.[5]

Nevertheless, there are only 20 CSSCI and PKU core Journals with "digital literacy" and "college students" in the retrieval title on CNKI, which is limited to 2022 to now. The research on College Students' digital literacy mainly includes three aspects: the current situation, problems and influenc factors.

On the one hand, Xuguoxing(et al.) believe that college students' digital literacy involves not only technical operation, but also cognition, innovation, ethics and other aspects.[6]Zhang Juan found that college students still have room for improvement in the application of digital tools, digital innovation and construction.[7]In the context of generative artificial intelligence, Tangqianwen (et al.) believe that college students have problems such as low level of technical understanding, strong dependence on technology, poor ability of information integration and creativity, and weak awareness of morality and privacy.[8]The research of the above scholars unanimously reflects that college students need to further improve their digital literacy in multiple dimensions to better adapt to the development of the intelligent era.

On the other hand, college students' individual,university and social factors can not be ignored. Xingwenming (et al.) based on UTAUT model and self-determination theory, found that college students' performance expectation, effort expectation, social impact and intrinsic motivation positively affect their digital literacy development intention, and development intention and convenience positively affect their digital literacy.[9]Digital literacy is closely related to future time insight and career planning. The latter two play an intermediary role between digital literacy and college students' employability, affecting college students' application and development of digital technology. The digital resources, curriculum and teachers' literacy of the university where the students are located are crucial to the cultivation of College Students' digital literacy. Zhouhaitao (et al.) pointed out that some universities have problems such as insufficient supply of high-quality digital resources, limited information retrieval methods, and database service capabilities to be improved.[10]Liqiushi (et al.) also mentioned that the digital literacy education of university libraries lacks pertinence and the educational efficiency is not high.[11]Xuzhiqiang believe that the cultivation of digital literacy in Colleges is not paid enough attention, systematic and lagging behind. Therefore, universities should reform the digital literacy curriculum system and integrate digital literacy education into professional courses.[12]The above scholars proposed to set up differentiated course content according to different grades and professional needs, integrate digital literacy into professional courses, general education courses and other collaborative innovation, optimize the information retrieval layer, strengthen the learning and application layer, and let students experience the application of digital technology through practical activities. At the same time, the information complexity and digital ethics problems in the network environment also bring challenges to the development of College Students' digital literacy.

Based on the above research results, it shows that the research on College Students' digital literacy has achieved a certain foundation. This paper conducts a group interview with the undergraduates of University of Science and Technology Heilongjiang with the help of NVivo14.0 software, and determines the basic understanding of College Students' digital literacy through qualitative analysis. It is expected to provide practical reference for constructing the division of College Students' digital literacy dimensions in line with the intelligent era, and promoting the modernization of college digital literacy cultivation system and governance ability.

Research methods and coding design:

Grounded theory

This study adopts semi-structured focus group interviews, and the number of people is controlled within 6. After the compere's brief introduction to "digital literacy", collect the feelings of College Students' use in learning and life. Then the qualitative research method of grounded theory is used to construct the theory.

In qualitative research, a very famous method of constructing theory is the grounded theory proposed by glass and Strauss in 1967. Grounded theory is a research method, or a "style" of qualitative research (Strauss, 1987:5). Its main purpose is to establish a theory on the basis of empirical data. Researchers generally have no theoretical assumptions before research, and directly summarize concepts and propositions from the original data, and then rise to theory.[13]Its main purpose is to systematically collect and analyze data for phenomena, and discover, develop and test theories from the data.[14]Then, through the use of NVivo14.0 qualitative analysis software, the interview data are encoded in three levels of grounded theory-open, spindle and selective coding. Finally, the theoretical model is formed through sorting, analysis and saturation test. The research and design process is shown in Figure 1.

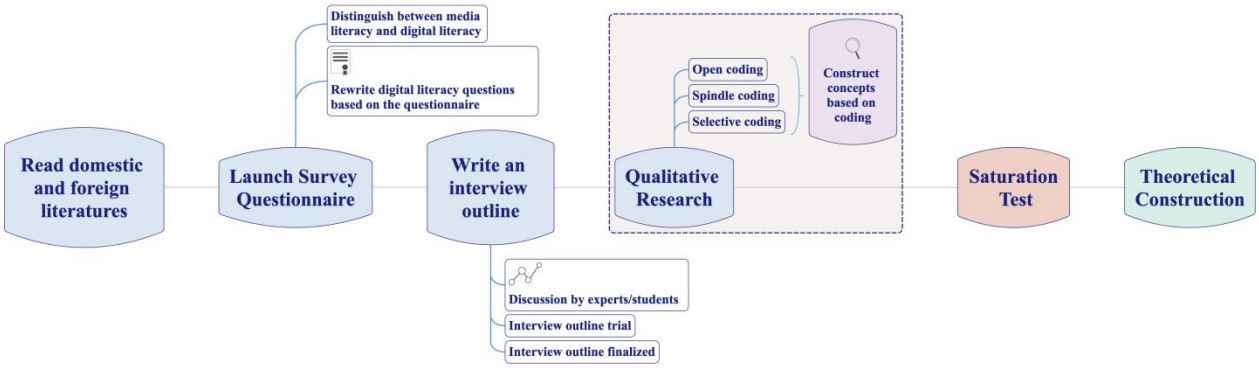

Figure 1 research design framework

Data sources

When exploring the research framework of College Students' digital literacy, although quantitative data has been analyzed and sorted out, due to the immutability of the questionnaire link data, the research is in a cold static state and lacks perceptual knowledge. It is often difficult to deeply capture its complex behavioral logic and internal cognitive process in the use of digital technology, and it is easy to ignore the individual differential experience in a specific situation. It should be noted that both quantitative research and qualitative research have their own unique value orientation, normative system, research procedures and practice.[15]In fact, quantitative research usually starts from the theory and tests the theory with data; On the contrary, qualitative research mostly starts from the experience of the subjects, establishes the relationship between the facts, and constructs the concept or theory based on the analysis of the data.

This study strictly abides by the operation steps of qualitative research, publishes the Recruitment Advertisement for students in University of Science and Technology Heilongjiang, displays the participant information book to the students who participate in the group interview, and needs them to sign the informed consent and confidentiality agreement, so as to ensure the authenticity and reliability of the data source.

The members of this qualitative research are undergraduates from University of Science and Technology Heilongjiang, including freshmen to seniors, with a total of 33 people. After cleaning and sorting out the interview data, three copies are retained as the saturation test. Finally, the research objects of 33 interviews and focus groups are determined, and the data collection of digital nutrition is carried out. In terms of gender, 15 boys (50%) and 15 girls (50%); 6 students majored in Liberal Arts (18.20%), 17 students majored in Science (51.52%), and 10 students majored in Engineering (30.30%); Among them, the number of League members is large, with 30 League members (90.90%), and 3 party members including probationary party members (9.09%). In terms of interview methods, all team members are engaged in offline face-to-face communication.

(3) During the research process, the concept and connotation of digital literacy were introduced to the interviewees first, and the formal interview was started after ensuring that the interviewees basically understand and can accurately answer the interview outline. In order to ensure the integrity of the research data for later use, the researcher recorded the interview after asking for consent, and imported NVivo14.0 after the interview, which was converted into text materials for coding in three stages. On this basis, the final theoretical saturation test was carried out.

Coding process

During the research process, the concept and connotation of digital literacy were introduced to the interviewees first, and the formal interview was started after ensuring that the interviewees basically understand and can accurately answer the interview outline. In order to ensure the integrity of the research data for later use, the researcher recorded the interview after asking for consent, and imported NVivo14.0 after the interview, which was converted into text materials for coding in three stages.

According to the comparative analysis of the two researchers' open-ended coding, it is found that the consistency percentages of the coding of their respective categories are greater than 95%, indicating that the two coding are reasonable to a certain extent. After two researchers discussed and deleted the interview records with inconsistent codes, the final theoretical saturation test was conducted.

Open coding:

Open coding, also known as initial coding, mainly goes deep into the original interview records obtained with the initial attitude, marks and analyzes the sentences and fragments of the respondents one by one, sorts them into

conceptual labels, names and codes them, and then classifies the initialized concepts to realize the extraction process of categorization. This study conducted concept coding and category extraction word by word from the collected five interview data, and extracted a total of 53 initial concepts. The specific coding results are shown in Table 1.

Subcategory	Conceptualization	Initial Concept	Files	Points
AA1Technology Experience	AI usage and experience	Using AI for homework	3	17
AA2Interference Factor	Interrupted by work or others	Someone called or busy work, etc	3	5
AA3Browse duration	Media content browsing time	Play without interference	4	6
AA4Content preferences	And Usage preferences	Star gossip, study, current affairs	4	11
AB1Functional limitations	AI contains sensitive words	Politically sensitive words not found	2	4
AB2Employment impact	AI can replace people?	Not be replaced for the time being	2	6
AB3Research software	Selection and main problems	CAD，Civil engineering modeling, etc	3	8
AB4Understanding ability	Basically understand	Can't see the political metaphor	4	8
AB5Information filtering	consciously avoid violent	Close of violence& pornography	2	3
AB6Software Acquisition	Download & install software	on the official website	3	10
AC1Software linkage	AI associated other software	deepseek and silicon-based flow	4	12
AC2Emotional relationship	AI omission as spiritual	AI cannot provide emotional value	4	4
AC3Functional focus	software unrelated learning	No necessary learn unrelated learning	1	1
AC4Interactive verification	different AI will cross verify	Comparison Chatgpt & deepseek	2	3
AC5Interest and learning	Interest influence learning	Don’t play games much in College	4	16
AC6Retrieval capability	Advanced search instructions	Baidu search and ask Big Models	3	8
BA1Conference pplications	Type of Digital Conference	Little understanding zoom	3	7
BA2 AI bias	unbiased/artificially biased	Pick the answers of AI selectively	3	10
BA3responsibility attribute	Who bears the algorithm bias	Mainly the database of large model	3	4
BA4social problem	Channels and categories	All concerned about employment	2	4
BA5Values conflict	spread views not with myself	own thoughts chat with others	3	9
BA6Digital Democracy	negative impact	Cyber violence is too serious	3	9
BB1legal consciousness	Don't leave objections	no need to leave a message	3	5
BB2Information screening	undistinguish the information	first time can't tell the true from the false	4	11
BB3literacy education	Colleges offer courses	Ambivalence	2	5
BB4Monitoring &freedom	Be monitored and express	Opinions on hot issues still be expressed	1	5
	relationship state monitoring & civil liberties	track epidemic or riot, etc., accept	3	6
BB5social value	advantages for the society	digital technology is good for today	1	2
BC1Attribute cognition	AI can’t replace human	Don’t chat with AI,too fun in the world	4	20
BC2Employment concerns	Concerns future employment	Worry about after 3-5 years	2	6
BC3Privacy protection	Refuse monitor in privacy	Privacy don't want to know	3	5
BC4Media cognition	Mainstream media cognition	several national mainstream media	4	7
CA1Work communication	spread, bad response correct	usually spread my works	4	12
CA2Social impact	reduces the social circle	AI instead of the teacher	2	2
CA3Art direction	AI cannot dominate Art	Good art is created by people.	1	5
CA4College spirit guidance	form a correct spiritual world	confusing to use AI	1	2
CA5Training adjustment	adjust the talent training	teach useful digital technology courses	1	3
CA6Information preference	Dynamic &static preferences	Prefer to watch dynamic videos	3	6
CA7Evaluation criteria	composition，color or else.	Games or Films judge aesthetic color	4	6
CA8diversified development	promotes	Expand your horizons	1	20
CB1Privacy boundaries	Ask AI for general questions	Big model leak personal information	4	15
CB2Political participation	influence the ability	participate electronic voting	3	9
CB3Public welfare value	benefits vulnerable groups	handicapped people to touch the world	1	6
CB4Status political contacts	Less political contact	Class voting, election, etc	3	4
CB5Technology & ideology	Digital Tec. and communism	Can’t enter the era of communism	2	25
CB6First contact with AI	Time of first contact with AI	First contact with AI after college	4	14
CC1Political advice	Don’t advise by media	be cautious	1	10

CC2Technical ethics	Ethical issues by digital Tec.	Invasion of privacy, misuse, etc	2	3
CC3Creativity improvement	promotes creativity	Learn from AI (big model) creativity	1	2
CC4Consciousness attribute	AI has no consciousness	AI is stupid now, not a real person	2	6
CC5Content quality	AI's content not perfect	AI trace is obvious	4	13
CC6Creative factors	don't care gender, age others	just for fun, not for others	4	8
CC7Information innovation	use PS innovate information	learned it when the homework	1	6
CC8Independent creation	Sometimes without AI	Some assignments by myself	3	3

Table 1: Results of Open Coding

Spindle coding:

Spindle coding, also known as axis coding, is to further summarize and refine on the basis of the above open coding, establish the logical relationship between the initial categories, especially to find the connection between the originally independent categories, and on this basis, raise it to a higher dimensional category. In this link, this paper extracts three main categories of Obtain, Assessment and Production, which correspond to nine sub categories respectively. As shown in Table 2.

Main category	Subcategory	Discription
Obtain	Need	Desire and demand for various resources, tools and related services in the digital environment.
	Ability	Abilities and skills in operating software, retrieving information, processing data, etc.
	Manipulate	Specific behaviors in the process of using software and tools.
Assessment	Understand	It involves the understanding and cognition of the nature and internal relationship of things such as the characteristics of digital technology and changes in the job market.
	Judgement	Judgment based on self cognition and values in terms of social phenomena, the impact of technological development, etc.
	Feedback	Including their own experience, curriculum, technical security and other suggestions and feelings.
Production	Share	Information exchange and sharing in political participation, public affairs discussion and other scenarios.
	Participate	Investment and action in digital literacy ethics discussion, creative practice and other activities.
	Create	Involving individual innovative output activities based on digital technology, educational philosophy, etc.

Table 2:Spindle Encoding Results

Slect coding：

The last step is selective coding, also known as theoretical coding, which refines and integrates the core category with final command from the above main categories, and links it into a theory that can specifically reflect and describe the overall phenomenon, especially including the above research results in a relatively unified theory. At the same time, through theoretical saturation test, no new concepts and categories were found in the last interview recording. Therefore, this paper believes that the theoretical saturation test is passed, the model is saturated, and the construction of College Students' digital literacy model is shown in Figure 2.

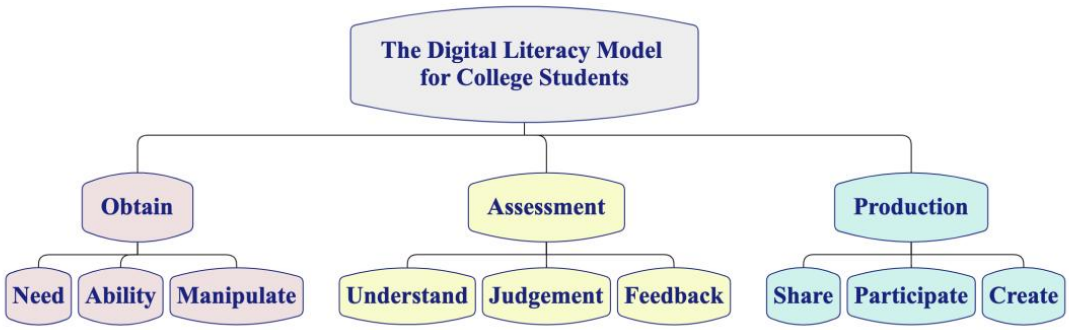

Figure 2 "obtain" - "assessment" - "production" Model Diagram

Research Results

According to the main category relationship structure, the role of College Students' digital literacy in learning and life can be extracted from three dimensions of "Obtain", "Assessment" and "Production". Among them, the Obtain dimension, as the primary factor of digital literacy, is an inevitable way for college students to communicate with the outside world through digital technology, which is in line with the process of information reception, selection and operation. Secondly, the Assessment dimension supports the mechanism of College Students' self-understanding, judgment, regulation and feedback, and ultimately plays a role in the reproduction and reprocessing of digital information.Finally, the Production dimension is the role of reproduction and reprocessing of digital information.Therefore, the "Obtain-Assessment-Production" theoretical model (OAP theoretical model) constructed in this study can present the desire, use, confusion and incentive of College Students' digital literacy in the intelligent era.

（1）Individual dimension: subjectivity construction and metacognition development

The main body of college students is the primary factor to attach importance to the cultivation of digital literacy. Nowadays, most college classrooms adopt a variety of digital ways to manage media teaching. AI enables thousands of industries and leads the leap of digital productivity.[16]In the interview, most students did not take it seriously when talking about the employment problem, and believed that artificial intelligence and robots could not replace their majors in the short term. But what if five or ten years from now? They showed a "hard to say" and "worried" look. Even at present, the response is not very enthusiastic about whether you can skillfully operate and install the software related to learning and scientific research, or use and, or, not and other operators for advanced search. Therefore, no matter how the intelligent era develops, it is not easy to achieve "things for me".

As the core subject of digital literacy cultivation, individual college students need to strengthen the self-directed development mechanism. First of all, we should establish a cognitive framework for digital technology, systematically understand or learn cutting-edge technology theories such as AI and big data analysis through participation in MOOC (large-scale open online courses), academic seminars and other ways, and form a structured knowledge system. Secondly, at the practical level, it is necessary to build a dynamic cycle mode of "learning reflection iteration", carry out discipline project practice activities by using the open source platform owned by each colleges, record their own learning trajectory, and use critical thinking to generally recognize and reflect on the digital product development process. In addition, with regard to the employment problem that college students are now generally concerned about, college students should take the initiative to establish an information niche selection strategy. According to their professional needs and career planning, in addition to seeking the help of school teachers, they should also establish a future employment information retrieval model that conforms to their personality and specialty in academic databases such as web of science and CNKI, improve the accuracy and efficiency of information acquisition, enhance their confidence in the application of digital technology, and exercise their ability to analyze and solve problems.

（2）University dimension: Construction of ecological education system

At present, the vast majority of colleges and universities in China have realized the liberalization of network coverage. Students not only have more advantages in the number of digital products they own, but also have more time to contact digital media, which provides opportunities for the cultivation of digital literacy in Colleges and universities both in class and after class. As the main position of digital literacy cultivation, colleges and universities need to build a three-dimensional education ecology including courses, teachers and platforms. Especially in the ideological and political education class, "digital power" can make students who can only watch PPT and video in class have an immersive reality. On the one hand, with the help of VR laboratory, students can experience the scene of war in individual form and understand the truth and value of history, so as to enhance the teaching effect of virtual simulation experience and enhance students' immersion in patriotism; On the other hand, the digital literacy course can also be combined with students' professional courses. Before "educating people", we should "educate morality" to solve the problems of "what kind of people to cultivate" and "how to cultivate people", so as to exert a subtle influence on ideology and behavior in daily learning and life. Referring to the media literacy research, Beijing Foreign Studies University has taken the English General Education Course "Media Literacy" as an example to carry out mixed teaching practice activities in schools such as the school of international business, the school of International Journalism and communication, the school of law and the school of international relations, and to explore the path and method of the organic integration of Ideological and political education and foreign language general education courses from the four dimensions of content chain, management chain, evaluation chain and teachers' words and deeds chain.[17]

This shows that the implementation framework of integrating digital literacy into curriculum ideological and political education has precedent, which can be further explored and practiced. Especially in the course construction, we can adopt the more advanced concept of "Result Oriented Education", deconstruct the digital literacy indicators into specific ability units such as data processing, algorithm design, digital ethics, develop modular course groups, and realize the visual evaluation of learning outcomes through the micro certification system. The construction of the teaching staff needs to implement the "double qualification" cultivation plan. On the one hand, the enterprise technical experts are invited to participate in the curriculum design.On the other hand, the teachers are promoted to participate in the Industry University research cooperation project, and the industry practice cases are transformed into teaching resources. On the construction of the practice platform, we can build an experimental environment of "Virtual and Real Integration", use the engine to develop the virtual simulation experiment system, and combine with the intelligent laboratory management platform to realize the real-time collection and analysis of experimental data, so as to provide immersion learning experience for science and engineering students.

（3）Social dimension: collaborative governance mechanism innovation

At the social level, we need to build a governance system with government leadership, enterprise participation and industry collaboration. In terms of top-level design, public welfare organizations and communication systems work

together. The development of media is closely related to the economy. The rapid development of digital media is the symbol of China's economic take-off.
Just as McLuhan, a famous Canadian communication scholar, believes that for society, the truly meaningful and valuable 'Information' is not the content spread by the media in various times, but the nature of the communication tools used in this era, the possibilities it creates and the social changes it brings. "[18]Therefore, digital media and society have achieved mutual success. Countries with highly developed mass media industry also have a relatively complete role in promoting social non-profit organizations. However, in this link, the research on digital literacy in China is only limited to universities and scientific research institutions, and its social acceptance is still relatively low. Despite the support of national policies, the prosperity of non-governmental cooperation has not yet formed. Therefore, we can refer to the allocation of policies, funds and personnel of some foreign social groups, and provide reference for the cultivation of digital literacy universities in China in the future.

In terms of policy formulation, it is suggested to refer to the action plan for improving digital literacy and skills of the whole people, formulate a special improvement plan for college students' digital literacy, and establish a national standard for digital skills certification. The industry should deepen the integration mechanism of production and education, embed the real projects of enterprises into the curriculum system of colleges and universities through the modes of order class and modern apprenticeship, and open the productive training environment such as industrial Internet platform and cloud computing resources. Industry associations need to play a professional leading role, regularly publish white papers on digital literacy development, and organize professional competitions such as blockchain application development and digital creative design, so as to form a virtuous cycle of "Promoting learning and teaching through Competition". In addition, it is also necessary to improve the evaluation system of digital literacy cultivation, establish a multi index evaluation model including technical ability, innovative thinking, ethical consciousness and other dimensions, and use big data analysis technology to achieve dynamic monitoring and precise policy implementation. The 55th Statistical Report on the development of China's Internet Network released by CNNIC's China Internet Network Information Center in January 2025 shows that the continuous breakthroughs in new technologies, the continuous emergence of new formats and the accelerated expansion of new applications of Artificial Intelligence have become an important driving force for a new round of scientific and technological revolution and industrial change.[19]The 2024 government work report proposed to deepen the R&D and application of artificial intelligence and carry out the action of "Artificial Intelligence+".[20]All this indicates that top-level design, public welfare organizations and communication system work together to promote the growth of digital literacy in China.

Thinking and Prospect

This paper constructs a theoretical model of "Obtain-Assessment-Production" through grounded theory, and points out that college students' digital literacy is affected by many factors, such as individuals, schools and society. The results show that: personal learning interest, motivation and sense of responsibility affect the enthusiasm of digital technology exploration and application. For example, students with strong learning interest are more active in contacting new technologies; At the school level, the richness of digital resources, the rationality of curriculum setting and the level of teachers' digital literacy are closely related to the cultivation of students' digital literacy. High quality digital resources and reasonable curriculum setting help to improve students' literacy; At the social level, the complexity of network information and the perfection of digital ethics have an important impact on the development of students' digital literacy, and the bad network environment is easy to interfere with students' information judgment and value formation.

However, since we have entered the era of intelligence, daily contact with digital media is inevitable. Based on the qualitative research results, this paper attempts to cultivate college students' digital literacy from the following three aspects. First of all, in the application of digital technology, some students are not proficient in the operation of professional related software and lack the ability to use advanced search instructions, which to some extent limits their ability to obtain accurate information and effectively deal with professional problems, which is not conducive to the in-depth study and practical application of their professional knowledge. Secondly, in terms of information feedback, the critical thinking on the information generated by digital technology is insufficient, it is difficult to accurately assess the quality of information, and it is easy to be misled by false or one-sided information, which may have a negative impact on the construction of its knowledge system and the formation of its values. Finally, as for the ways and methods of public affairs participation, the depth and breadth of College Students' participation with the help of digital technology are limited, and they fail to give full play to the advantages of digital technology in expanding the channels of public affairs participation and enhancing the influence of participation, which is not conducive to the cultivation of their sense of social responsibility and civic awareness, so they need to continue to explore. These problems reflect that although college students are living in the digital age, their digital literacy

ability has not been fully developed and can not fully meet the requirements of the intelligent age for their information processing, innovation and social participation.

In view of the above problems, future research and practice need to be carried out from many aspects. At the research level, the data of this study are only from undergraduates, and the sample has limitations. Subsequent interviews with postgraduates and doctoral students should be supplemented to cover a wider group of students and clarify the differences in digital literacy among students with different academic levels. At the same time, it is necessary to explore the differences in digital literacy of college students from different regions, majors and genders and the strength of their influencing factors, and build a more perfect measurement index system and theoretical model to provide a more scientific and accurate basis for the formulation of cultivation strategies.

The improvement of College Students' digital literacy is a long-term and systematic project, which requires continuous attention and joint efforts of all parties. Only in this way can college students better adapt to the needs of social development in the intelligent era, give full play to the advantages of digital technology, achieve comprehensive development, and contribute to the digital transformation and innovative development of society.

***Acknowledgments*:** This research was funded by the Heilongjiang Province Basic Research Business Fund "Research on Empowering Higher Education Practice Development with Digital Literacy"(Grant No.: 2024 -KYYWF -1042).

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