

# Research on the practical path of college network ideological and political education in the era of artificial intelligence

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**Abstract:** With the rapid development of artificial intelligence technology, the field of education is experiencing profound changes. As an important position for cultivating students' ideological and moral accomplishment, political concept and value concept, the network ideological and political education in colleges and universities shows new vitality and potential under the ability of artificial intelligence technology. This paper aims to explore the realistic path of college network ideological and political education in the era of artificial intelligence, analyze the current difficulties faced by college network ideological and political education, explain the characteristics of the education field in the new era endowed by artificial intelligence. The advantages and significance of artificial intelligence in improving the quality and effect of college network ideological and political education were expounded and specific implementation strategies were put forward.

**Keywords:** artificial Intelligence, ideological and political education, college, practical path

## 1. Introduction

With the rapid development of artificial intelligence technology, from intelligent assisted teaching system to personalized learning recommendation, from virtual reality teaching to big data analysis, artificial intelligence is profoundly changing the form and mode of traditional education [1-2]. The release of the policy document "Guiding Opinions on Accelerating Scene Innovation and Promoting High-quality Economic Development with High-level application of Artificial Intelligence" points out the importance of building "smart education" and "smart campus". It also provides direction for the deep integration of artificial intelligence and education. The application of artificial intelligence technology not only improves the efficiency and effect of traditional teaching, but also promotes the optimal allocation and sharing of educational resources, and realizes educational equity and personalized education [3].

As an important part of the college education system, ideological and political education in colleges and universities undertakes the important task of cultivating students' ideological and moral qualities, political concepts and value concepts. With the popularization of the Internet and the development of information technology, the network ideological and political education in colleges and universities has gradually become a new position of ideological and political education. However, the traditional mode of online ideological and political education often has some problems, such as decentralized teaching resources, single teaching content and conservative teaching methods, which is difficult to meet the needs of students in the new era. Therefore, the integration of artificial intelligence technology into online ideological and political education in colleges and universities is of great significance for improving the effect of ideological and political education and enhancing the ideological and moral quality of students [4-5].

## 2. Realistic dilemma and necessity of online ideological and political education in colleges and universities

### 2.1 The realistic dilemma of college network ideological and political education

At present, the network ideological and political education in colleges and universities enriches the ideological and political work of colleges and universities, and is a new way and method of educating

students, but at the same time, it also faces a series of practical difficulties, which makes the education effect is not good<sup>[6]</sup>.

### ***2.1.1 Insufficient application and integration of technology***

Although artificial intelligence technology has brought many possibilities to the network ideological and political education in colleges and universities, there are still many limitations in the practical application of professional research and development, system integration and other aspects, which limit the actual teaching and affect the effect of education. Moreover, in the process of integrating artificial intelligence with network ideological and political education, there is a lack of in-depth system design and overall planning, and it is difficult to truly exert the advantages of technology empowerment. On the other hand, the hardware and software facilities for integrating artificial intelligence technology into college network ideological and political education are still relatively weak.

### ***2.1.2 The content and form of education are single***

The content of online ideological and political education in some colleges and universities still follows the traditional textbooks and lacks the sense of The Times and pertinence. In the preparation stage of teaching, some ideological and political workers patchwork educational materials or cases at will, resulting in outdated content and information, lack of diversity and pertinently. At the same time, the lack of attention to emerging social hot spots, online public opinions and other issues has led to the disconnection of educational content from reality. Under these circumstances, the original creativity and pertinence of the online ideological and political education content are insufficient, which naturally makes it difficult to attract college students and arouse their interest and resonance. Many colleges and universities still use a single lecture-style teaching method, interspersed with some video, audio and other multimedia elements, lack of interaction and participation, and the innovation of educational forms is still insufficient.

### ***2.1.3 College students' self-growth ability needs to be improved***

In the process of continuous learning, improvement and development, college students show the comprehensive ability to adapt to changes, achieve goals and maintain a positive attitude. At present, in the new media environment, the information sea is quantified and decentralized, and the mass and fragmentation of network information are easy to make students affected by false information and adverse trends of thought, resulting in cognitive bias. The impact of multiple values on the cognitive position of college students is conducive to cultivating students' open thinking and inclusive mentality, but it also easily leads to confusion of thought and confusion of value concepts. This not only affects students' value judgment and behavior choice, but also may cause resistance to ideological and political education.

### ***2.1.4 The construction of network ideological and political education personnel needs to be strengthened***

In the era of artificial intelligence, the role of teachers will change from knowledge imparts to mentors and assistants. This change puts higher demands on teachers and requires them to re-examine their roles and responsibilities and adapt to the new educational environment. In addition, the lack of a set of scientific assessment and incentive mechanism has led to some teachers engaged in online ideological and political education being slack and unable to devote themselves to it, which is one of the urgent problems to be solved in the current online ideological and political work in colleges and universities.

## ***2.2 Necessity of online ideological and political education in colleges and universities***

With the rapid development of information technology, network has become an important platform for college students to obtain information, exchange ideas and express emotions. Ideological and political education in colleges and universities should conform to the development trend of the era of artificial intelligence, and make use of network platforms, new media technologies and intelligent algorithms to carry out ideological and political education more effectively. The network ideological and political education in colleges and universities can break the time and space limitation of traditional classroom ideological and political education, realize the sharing of educational resources, enrich the educational content, broaden the teaching situation, improve the educational effect, and enhance the attractiveness of ideological and political education. At the same time, online ideological and political education can provide personalized learning programs, which are closer to the actual life and ideological needs of college students, and enhance the pertinence and effectiveness of ideological

and political education. Online ideological and political education in colleges and universities guides college students to use the Internet correctly, improves their network literacy and information screening ability, helps college students resist the erosion of bad information on the Internet, and maintains network security and stability.

### **3. The era of artificial intelligence has given college students the advantages**

The ideological and political education is an open and dynamic system. It is inevitable trend of the development of ideological and political education practice in colleges and universities that the ideological and political course would be transited to intelligent ideological and political education<sup>[7]</sup>.

#### ***3.1 Personalized Learning***

Machine learning technology analyzes students' online learning duration, frequency, learning content selection and other data, which can reveal students' learning preferences and ability level, so as to help teachers better understand students' learning dynamics and ideological status, and then adjust teaching plans and optimize teaching content. This personalized learning path can improve students' learning effectiveness and satisfaction.

#### ***3.2 Intelligent resource allocation***

Knowledge graph can integrate paper books, online courses, video lectures and other resources in ideological and political education to form an interdisciplinary knowledge network. This not only improves the utilization rate of resources, but also enables students to quickly find the required learning resources based on the nodes in the graph, which improves the learning efficiency.

#### ***3.3 Interactive learning experience***

The immersive teaching of virtual reality technology can create a multi-modal simulation environment for students to experience the classroom, such as the virtual simulation of the National Museum, the struggle course of revolutionary sages, etc., so that students can feel the essence and charm of the excellent traditional Chinese culture, red culture and era culture in the immersive environment, and enhance the sense of substitution and interest in learning.

#### ***3.4 Improve the teaching efficiency and quality***

The learning problems could be overcome and the learning efficiency could be improved through the instant feedback of intelligent tutoring system. The optimization algorithm can also complete part of the programmed or repetitive work, reducing the workload of ideological and political teachers and giving them more time to focus on teaching research and personalized tutoring. At the same time, combined with the "online + offline" mixed teaching mode of artificial intelligence technology, ideological and political teachers can flexibly use a variety of teaching methods, such as discussion method, situational teaching method, experience teaching method, etc., to improve the pertinence and effectiveness of online ideological and political teaching.

### **4. The thinking logic of online ideological and political education in universities in the era of artificial intelligence**

The thinking logic of online ideological and political education in colleges and universities in the era of artificial intelligence is multifaceted, which not only reflects the inevitable requirements of the progress of The Times, but also follows the laws of ideology and politics and education, highlights the mission of educating people, and promotes the intelligent upgrading of education and teaching<sup>[8]</sup>.

#### ***4.1 Follow the theoretical logic of ideological and political laws and educational laws***

In the course of its long-term development, the network ideological and political education in colleges and universities has formed specific theoretical logic and implementation laws. To integrate artificial intelligence technology into it, we need to follow the basic laws of ideological and political work to ensure the correct orientation and effect of ideological and political education. At the same

time, artificial intelligence technology also provides more accurate and efficient educational means for ideological and political education, which helps realize the value orientation of ideological and political education, so as to better meet the needs of students.

#### ***4.2 Practical logic of precise policy for individual groups***

Contemporary college students have distinct personality characteristics and self-awareness, and strong sensitivity to information and observation. Artificial intelligence technology can accurately depict college students' complex social networks and interactive networks through algorithm systems and big data recognition systems, and predict their ideological dynamics, psychological trends, emotional needs and value expectations. This provides educators with a more accurate and scientific basis for decision-making, which is conducive to the realization of accurate policies and personalized education in ideological and political education. At the same time, artificial intelligence will also change the teacher-student relationship in ideological and political education of college students and enhance the subjectivity of college students. By means of intelligent teaching assistant, intelligent companion system and intelligent service system, artificial intelligence technology provides more convenient and efficient teaching support for ideological and political education, which helps to improve the quality and effect of teaching.

#### ***4.3 Highlight the value logic of the mission of education***

The fundamental purpose of online ideological and political education in colleges and universities is to cultivate outstanding talents with noble character, firm belief and strong sense of social responsibility. By providing rich and diverse educational resources and personalized learning paths, artificial intelligence technology helps guide students to establish a correct world outlook, outlook on life and values, and enhance their national consciousness and national pride. At the same time, artificial intelligence technology can also create a more vivid and real learning environment for ideological and political education, enhance students' learning experience and participation, and better realize the mission of educating people.

### **5. Realistic strategies for college network ideological and political education in the era of artificial intelligence**

Online ideological and political education in colleges and universities should fully integrate the advantages of artificial intelligence technology, deeply grasp the characteristics of college students' ideological behavior and the educational laws of network education, adhere to ideological guidance, actively innovate educational concepts and content carriers, build a strong ideological and political education team, and promote the quality and efficiency of online ideological and political education in colleges and universities<sup>[9-10]</sup>.

#### ***5.1 Build an intelligent education and teaching platform system***

Colleges and universities should build an intelligent education and teaching platform system to realize the organic integration and sharing of ideological and political teaching tools and methods. Through the intelligent teaching platform, ideological and political teachers can easily obtain all kinds of ideological and political teaching resources and carry out personalized teaching activities; Students can choose suitable learning paths and resources according to their own learning needs and interests. At the same time, the intelligent education and teaching platform can also realize real-time tracking and analysis of students' learning process, and provide teachers with accurate teaching feedback and guidance. Universities should increase research and development of artificial intelligence technology, especially for applied research in ideological and political education. Through the introduction of advanced AI technology, the application scenarios and modes of artificial intelligence technology in ideological and political education should be actively explored. Such as the development of intelligent question and answer system, the establishment of knowledge map of ideological and political education, and the construction of all-scene immersion experience classroom. Then the technical level of "AI ideological and political education" could be improved.

### **5.2 Promote the construction of digital ideological and political education resources**

Digital ideological and political education resources are a sign of the deep integration of artificial intelligence and college students' ideological and political education. First of all, it is necessary to strengthen top-level design and planning, and strive for policy support and capital investment from the government and education authorities, so as to provide a strong guarantee for the construction of digital ideological and political education resources. Secondly, it is necessary to build a collaborative cooperation mechanism, strengthen cooperation with scientific and technological enterprises, jointly develop digital ideological and political education resources, achieve complementary advantages and resource sharing, establish an inter-school cooperation mechanism, jointly promote the construction of digital ideological and political education resources, and promote the exchange and sharing of high-quality resources. At the same time, it is necessary to promote the digital teaching process, break the limitation of time and space, provide teachers and students with more flexible and diversified teaching and learning methods, and cultivate the habit of teachers and students to work and study through digital platforms. Finally, we should build a strong data security defense line. In the process of constructing digital ideological and political education resources, universities will inevitably face the risk of data leakage. It is necessary to guide teachers and students to use and protect personal data reasonably, avoid data leakage and abuse, improve the security of artificial intelligence education, and provide safe digital ideological and political education resources for teachers and students.

### **5.3 Improve the artificial intelligence literacy of teachers**

Teachers should actively adapt to the challenges brought by the era of artificial intelligence and enhance their own quality. On the one hand, they should improve their technical literacy and master the basic knowledge and application skills of artificial intelligence technology; On the other hand, it is necessary to clarify the value orientation of ideological and political educators, and shoulder the responsibility of leading students to establish correct values and improve their judgment and thinking ability. Colleges and universities should regularly carry out professional skills training, invite artificial intelligence experts and scholars in the field of technical education to train ideological and political teachers, and help teachers quickly understand and skillfully use artificial intelligence technology.

## **6. Summary**

The era of artificial intelligence has brought new opportunities and challenges for college network ideological and political education. The use of artificial intelligence technology can build a more intelligent, personalized and efficient online ideological and political education system, so as to improve the quality of education and cultivate more outstanding talents with correct values and world views.

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