

# Research on Ideological and Political Education in Colleges and Universities under Artificial Intelligence

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**Abstract:** *In the era of artificial intelligence, the ideological and political education in colleges and universities has ushered in new development opportunities. The ideological and political education in colleges and universities can use artificial intelligence technology to realize information sharing and provide intelligent learning environment for students. This thesis analyzes the changes of ideological and political education in colleges and universities in the era of artificial intelligence and introduces the new forms of ideological and political education in colleges and universities. What's more, it also studies the innovative path of ideological and political education in colleges and universities under the background of artificial intelligence, and puts forward some suggestions, such as perfecting the education system, implementing personalized education, innovating education methods, building an intelligent platform, and building a high-quality teacher team.*

**Keywords:** *artificial intelligence; Colleges and universities; ideological and political education*

## 1. Introduction

With the development and application of artificial intelligence technology, the mode of ideological and political education in colleges and universities has changed greatly. Artificial intelligence technology plays an important role in the reform and innovation of higher education. We should make full use of artificial intelligence technology to innovate the mode of ideological and political education colleges and universities and give full play to the advantages of artificial intelligence technology. Moreover, it is also required to make ideological and political education symbolize the development of data, virtualization and precision. More importantly, we should enable artificial intelligence to ideological and political education, and effectively improve the ideological and political literacy of college students.

## 2. The transformation of ideological and political education in colleges and universities under artificial intelligence

### 2.1 From focusing on experience to focusing on data

Traditional ideological and political education is often based on teachers' experience, with weak awareness, and rarely adopts quantitative analysis. Teachers of ideological and political education will generally adopt the method of investigation, analyze students' ideological trends according to the of investigation, and educate and influence students from the emotional level. Under the background of artificial intelligence, ideological and political teachers begin to pay attention to data, observe and analyze students' ideological trends and behavior patterns in all directions, and process all aspects of information in order to grasp students' ideological trends. Many teachers began to change their own thinking mode and education mode, instead of relying solely on experience for teaching, they studied applied artificial intelligence technology, analyzed students' ideological characteristics with advanced technology. Additionally, they not only analyzed students' learning mode and quantified all aspects, also collected data with artificial intelligence technology, and processed and analyzed the data, so as to help teachers adjust their teaching plans and provide reference for ideological and political teaching.

### 2.2 From simple connection to deep embedding

Artificial intelligence technology plays an important role in the reform and innovation of and political education in colleges and universities. Teachers can efficiently process data and

with intelligent algorithms and other technologies. They can also promote the ecological reform of education with the support of artificial intelligence technology and make artificial intelligence deeply embedded in ideological and political education. On the other hand, it is also helpful to change the traditional simple connection form and provide technical support for the construction of intelligent system of ideological and political education. Meanwhile, it plays an important role in continuously broadening the horizons of ideological and political teachers, improving their comprehensive quality, and promoting the high-quality development of ideological and political education in colleges and universities. In the integration and development of artificial intelligence and education, ideological and political teachers will constantly update their own educational thinking and concepts, actively explore new educational models and teaching methods, and deeply embed artificial intelligence technology into ideological and political education, which can give full play to the advantages of artificial intelligence technology in all aspects of education and truly reflect the value and role of artificial intelligence in education<sup>[1]</sup>.

### ***2.3 From a single subject to multiple subjects***

Under the traditional education mode, teachers are the leaders in the classroom and the main body of ideological and political education. Teachers instill ideological and political knowledge into students, rarely pay attention to students' ideas, and can't accurately grasp students' ideological trends. The relationship between ideological and political teachers and students is not close enough. Artificial intelligence has changed the mode of ideological and political education, and the ideological and political classroom has changed from a single subject to multiple subjects, and ideological and political education has been carried out together with the participation of multiple subjects. Ideological and political teachers are fully aware of students' dominant position, consider students' actual situation, start teaching with students as the core, intelligently analyze students' data information, carry out targeted ideological and political education, and let students participate in ideological and political education, reflecting students' subjectivity<sup>[2]</sup>.

### ***2.4 From centralized education to personality education***

There are a large number of students in colleges and universities. Faced with a large number of students, it is difficult for teachers to effectively grasp the actual situation of each student. They can only use centralized education to explain the same theoretical knowledge to all students, and cannot provide personalized education. This educational model can only meet the learning needs of some students and adapt to the situation of some students. Artificial intelligence technology can make ideological and political education more accurate. Teachers can use technology to analyze students' individual situation, understand students' learning needs, provide students with targeted content, and adopt unique educational means to effectively improve each student's ideological and moral literacy. In order to fully understand students' situation, artificial intelligence technology can be used to collect students' data information, such as the use of students' campus one-card, borrowing books in the library, watching videos and browsing data on the online learning platform, analyzing students' ideological trends and summarizing students' behavior rules according to the collected data information, and teachers can also implement personalized education programs according to the data analysis results and user portraits, so as to make ideological and political education more accurate, effectively solve each student's problems and meet each student's needs.

## **3. The new form of ideological and political education in colleges and universities under artificial intelligence**

### ***3.1 Digital ideological and political education***

Artificial intelligence is based on big data. Applying this technology to ideological and political education can form a digital ideological and political education form. With the support of artificial intelligence, there will be in-depth communication between teachers and students, and the process and effect of ideological and political education will be presented in digital form. Teachers can make quantitative analysis according to the data and fully understand the learning situation and ideological trends of each student. In the form of data ideological and political education, ideological and political teachers can integrate and analyze data information, implement diversified teaching methods with the help of artificial intelligence technology, provide targeted educational content for different students,

and effectively improve the quality of ideological and political education <sup>[3]</sup>.

### ***3.2 Virtualized Ideological and Political Education***

Great changes have taken place in the education mode in the era of artificial intelligence. Colleges and universities can implement virtual education with the help of artificial intelligence technology, can adopt virtual ideological and political education forms, create virtual educational places and social spaces, and provide new kinetic energy for ideological and political education. Colleges and universities should vigorously support the development of virtual teaching mode, build virtual teaching and research rooms, realize resource sharing through virtual ideological and political education. It is also necessary to integrate virtual and reality and break the restrictions of time and space on ideological and political education. Colleges and universities can comprehensively use MR, AR, VR and other technologies to create an ecological field for ideological and political education, and use virtual simulation technology to create an educational environment and provide educational resources, making ideological and political education more flexible and free, and providing intelligent learning space for students.

### ***3.3 Precise Ideological and Political Education***

Artificial intelligence is conducive to promoting the precise development of ideological and political education and achieving the goal of educating people accurately. Ideological and political teachers can accurately analyze each student's ideological trends, personality characteristics and learning situation by using artificial intelligence technology. It can also formulate personalized education programs with the help of artificial intelligence technology to realize accurate education. In teaching evaluation, artificial intelligence technology can also be used to ensure the accuracy, objectivity and comprehensiveness of the evaluation results, optimize the teaching plan according to the accurate evaluation results, and make ideological and political education fit the actual situation of students. Teachers should reasonably use artificial intelligence technology to carry out teaching with precise ideological and political education, so that ideological and political education can develop in a precise and personalized direction <sup>[4]</sup>.

## **4. Innovative strategies of ideological and political education in colleges and universities under artificial intelligence**

### ***4.1 Improve the ideological and political education system based on artificial intelligence***

The development of artificial intelligence can really promote the reform and innovation of ideological and political education, but in the application of artificial intelligence technology, there will be problems in network information security, etc. In order to make better use of artificial intelligence technology, we need to pay attention to privacy security issues, establish a perfect system, restrict the application of artificial intelligence, and prevent students' personal privacy from leaking out. Colleges and universities should establish a supervision system, and after collecting students' ideological dynamic information and behavior habit information, they need to keep the data information well. When colleges and universities apply artificial intelligence educational products, they must use the products in accordance with regulations, set permissions for faculty and staff, and prevent irrelevant personnel from viewing students' private information at will. Colleges and universities should clearly define the application scope and norms of artificial intelligence technology, and ideological and political teachers must use artificial intelligence technology in accordance with the regulations. If teachers use this technology in violation of regulations, causing serious consequences, colleges and universities should punish them according to the system regulations and hold them accountable according to their responsibilities and authorities, so as to warn teachers and make them standardize the application of artificial intelligence technology. Researchers, developers and users of artificial intelligence technology should have awareness of information security and protect students' personal information. All personnel who have access to students' personal information should establish awareness of information security and strengthen the supervision and protection of private data. They also need to ensure the security of network information in colleges and universities, apply artificial intelligence technology to ideological and political education on the basis of ensuring information security, and eliminate hidden dangers in the intelligent development of ideological and political education.

#### ***4.2 The use of artificial intelligence technology to achieve personalized education***

In order to realize personalized education, ideological and political education in colleges and universities should be based on big data, comprehensively use internet technology and big data technology, comprehensively collect students' data information, analyze students' data information, and implement personalized education according to students' specific conditions. Ideological and political teachers in colleges and universities should establish big data thinking and realize the advantages of big data technology in ideological and political education. They are also supposed to collect and integrate data information, use advanced technology to improve the efficiency of data processing and data analysis, share data information with the support of big data technology, and provide teachers with sufficient information. Ideological and political teachers in colleges and universities should actively study big data technology, skillfully use this technology, and accurately predict students' thoughts through improvement plans. Many students have a strong sense of independence and autonomy. When encountering problems, they rarely seek teachers' help. Teachers can use technology to predict and analyze, judge students' ideological trends. It is also useful to understand students' ideological tendencies and emotional conditions, and generate personalized files according to data analysis results. Teachers can understand students' basic situation according to students' personalized files, accordingly provide students with personalized educational content. As a result, they can interact and communicate with students in the network, and help students solve ideological puzzles in time. Teachers should be cautious about the results of big data analysis, and can't blindly trust the results of big data analysis. Teachers can observe students in the classroom and analyze the completion of students' homework. Teachers should pay attention to students' performance when communicating with students, and use the results of big data analysis selectively in combination with real-life situations to ensure that personalized education has certain effectiveness.

#### ***4.3 Use artificial intelligence technology to innovate the way of ideological and political education***

Ideological and political teachers in colleges and universities should innovate the educational model and adopt multimodal learning analysis technology to collect and analyze students' data information, so as to master students' learning habits, thinking cognition and thoughts and emotions. Multimodal data analysis can help teachers find many details and fully grasp students' New Year greetings in the learning process. It can determine the education plan according to students' feedback, and provide students with more accurate ideological and political education content as well. Teachers of ideological and political education in colleges and universities can also adopt interdisciplinary integration education mode. In the application of artificial intelligence, they can combine ideological and political education content with other students' professional content, carry out interdisciplinary education for students, in addition, they can also integrate ideological and political content into the education of various disciplines, and adopt intelligent curriculum ideological and political education mode to effectively improve students' ideological and political literacy. In interdisciplinary education, we can combine artificial intelligence-related disciplines with ideological and political education and promote the deep integration of artificial intelligence and humanities. It is of great benefit to encourage mutual cooperation among disciplines, carry out ideological and political education in a brand-new way, and cultivate high-quality professionals.

#### ***4.4 Building an intelligent ideological and political education platform***

In order to successfully apply artificial intelligence technology, colleges and universities need to vigorously support the construction of intelligent platform, and improve intelligent teaching infrastructure on campus. Meanwhile, it is vital to strengthen network construction and equip with high-quality multimedia equipment. They are also supposed to install interactive muscone in classrooms and constantly improve supporting intelligent teaching infrastructure. Furthermore, it is also significant to create intelligent education space, and provide good software and hardware facilities for ideological and political teaching. Colleges and universities should build an intelligent education platform to provide intelligent education and management platforms for teachers and intelligent learning platforms for students. In order to give full play to the advantages of artificial intelligence technology, ideological and political teachers can use artificial intelligence technology to integrate educational resources, collect students' data information and analyze the data information. Colleges and universities can increase the consulting function in the intelligent education platform, and students can consult teachers about mental health problems, as well as problems in study and employment, so as to realize high-quality education and provide support for ideological and political education through the

intelligent education platform.

#### **4.5 Build a team of ideological and political education with high technical literacy**

In order to make full use of artificial intelligence technology and give full play to its advantages, colleges and universities should train ideological and political teachers, improve their artificial intelligence technical literacy and improve their technical application ability. Ideological and political teachers should take the initiative to study artificial intelligence technology and carry out education with the help of artificial intelligence technology. Ideological and political teachers should fully realize the advantages of man-machine collaboration, master the operation methods of relevant instruments, equipment and systems, be able to solve problems by using relevant equipment and systems, and constantly optimize ideological and political education in colleges and universities. Ideological and political teachers can use artificial intelligence technology to obtain educational resources, provide students with diversified and personalized educational resources, and meet the learning needs of different students. At the same time, it is useful to eliminate the defects of traditional ideological and political education, and create high-quality ideological and political education courses. Ideological and political teachers should constantly improve their professional quality, teaching ability and technical level, and use this technology to collect, integrate and analyze information. Ideological and political teachers can also learn from other teachers' successful teaching experience, formulate scientific and accurate teaching programs, provide students with more advanced educational content, and enable students to master the latest ideological and political theory and realize deep learning.

In the era of artificial intelligence, colleges and universities should clarify the role orientation of ideological and political teachers, and ideological and political teachers should change to guiding roles, innovative roles and emotional roles. Ideological and political teachers should bear the responsibility of value orientation, let college students establish correct socialist core values, improve students' discrimination ability and strengthen value guidance. Ideological and political teachers should also strengthen educational innovation, use new technologies, new software and new equipment, and constantly improve the quality of ideological and political education in educational innovation. Ideological and political teachers should also pay attention to students' psychological state and emotional changes, find students' psychological problems in time, help students to channel negative emotions, guide students to face pressure with correct concepts, deal with problems with correct methods, improve students' personality through ideological and political education, improve students' psychological quality, and enable students to establish lofty ideals and achieve educational goals.

## **5. Conclusion**

Ideological and political education in colleges and universities should conform to the development trend of the times and embed advanced artificial intelligence technology into ideological and political education in colleges and universities. They are also supposed to use artificial intelligence technology for data analysis and fully grasp the actual situation of educational objects. What's more, it is important to grasp the ideological trends of students, and provide reference for ideological and political education and teaching evaluation. In order to give full play to the advantages of artificial intelligence, colleges and universities should actively build an intelligent platform and train teachers so that ideological and political teachers can have a higher technical level and realize intelligent education and personalized education.

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