

# Research on the Current Situation and Countermeasures of Integrating Artificial Intelligence into Ideological and Political Teaching in Universities

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**Abstract:** With the rapid development of modern science and technology, artificial intelligence (AI) technology is becoming more and more mature, which has brought a profound impact on every field of human society. The new era background provides a new teaching concept for ideological and political teaching in colleges and universities. Teachers in colleges and universities should adopt a positive attitude to face the teaching change brought by new technology, update the teaching ideas in time, and adjust the teaching strategy. This paper will analyze the current situation of the integrated development of AI and ideological and political teaching and put forward corresponding teaching strategies to help train well-developed socialist successors.

**Keywords:** Artificial intelligence; Ideological and political education; Current situation analysis; Countermeasure analysis

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## 1. Introduction

In the new historical period, the development of science and technology brings not only opportunities but also great challenges to college teaching. Marx once said: “Natural science, through industry, is increasingly entering man’s life in practice, transforming man’s life, and preparing him for liberation”<sup>[1]</sup>. As an important achievement of the new round of scientific and technological revolution, artificial intelligence has effectively promoted all walks of life to move towards digitalization and intelligence. Ideological and political education in colleges and universities should follow the pace of the development of the times, integrate artificial intelligence (AI) technology into teaching, so that ideological and political teaching can develop in an intelligent direction, improve the efficiency of ideological and political teaching, and enhance students’ ideological and political discipline accomplishment.

## **2. The significance of integrating AI into ideological and political teaching in colleges and universities**

The integration of AI into ideological and political teaching in colleges and universities has important practical significance. In order to meet social development, the cultivated talents must combine science and technology and keep up with the trend of the times, so as to cultivate “social people” who are politically correct, well-developed, and useful to society <sup>[2]</sup>. First of all, the integration of AI into ideological and political teaching overcomes the shortcomings of traditional teaching, provides a variety of teaching forms for ideological and political teaching, breaks the limitation of time and space, and helps teachers and students realize barrier-free interaction. Compared with the traditional teaching of teachers, the integration of AI into ideological and political teaching allows students to have more independent learning time. Students can choose their favorite content according to their own learning level and learning interests, which can effectively stimulate students’ interest in learning and exercise their ability of independent learning.

Secondly, the integration of AI into ideological and political teaching can also help students achieve personalized development. Learners can get the resources they need anytime and anywhere through artificial intelligence terminals, making lifelong learning possible <sup>[3]</sup>. AI has powerful storage and computing power, can quickly analyze each student’s learning needs and learning shortcomings, assist students in making learning plans, push corresponding exercises and courses for students, and provide targeted help for each student’s ideological and political learning, so as to achieve personalized education. Students can also use AI technology to quickly acquire knowledge and sort out learning information. Faced with the huge knowledge network of the Internet, students are prone to losing themselves and do not know what is useful news. AI technology has a unique intelligent algorithm, which can help students select useful teaching resources, organize and summarize knowledge, improve learning efficiency and learning effect.

## **3. The current situation of AI integration into ideological and political teaching in colleges and universities**

### **3.1. The application of AI into ideological and political teaching in colleges and universities**

In recent years, the development environment of artificial intelligence has undergone profound changes, showing new features such as deep learning, cross-border integration, man-machine collaboration, swarm intelligence openness, and autonomous control <sup>[4]</sup>. The state attaches great importance to the effective application of AI technology in education and has issued a series of relevant policies to promote the continuous development of AI teaching. For example, the “New Generation of Artificial Intelligence Development Plan” clearly put forward the goal of training high-level talents. In addition, the research on computer-aided instruction and expert systems can be traced back to the article published by Zhengxuan Wang in 1984 <sup>[5]</sup>.

Many schools have introduced AI technology to assist teaching. For example, some schools have introduced smart classrooms, which is an important carrier of a new teaching mode based on “5G + AI” technology. It can provide real-time and reliable teaching resources and services for teaching and realize the intelligence of teaching <sup>[6]</sup>. However, AI teaching is still in the trial stage, and the difficulties it faces are far greater than the current achievements, with a lot of room for development.

### **3.2. The development dilemma of integrating AI into ideological and political teaching in colleges and universities**

The process of integrating AI into ideological and political education in universities lacks a perceptual mode. In the ideological and political education in colleges and universities under the integration of AI, teachers

still serve most of the teaching work, because ideological and political education not only needs to convince people by reason and service but also needs to educate people by virtue and transform people by heart, guiding and inspiring students. High-quality ideological and political education must adhere to the student-centered, infiltrating education and spreading ideas in a subtle way<sup>[7]</sup>. Therefore, when AI is integrated into ideological and political teaching, it not only requires competent technical personnel but also requires the guidance of relevant ideological and political talents to improve the perceptual education in AI ideological and political teaching. At present, AI cannot simulate the emotional thinking of the human brain well, cannot complete the ideological guidance and value orientation of students, and cannot complete the educational requirements of ideological and political education, thus becoming a major barrier to the deep integration of AI and ideological and political education.

Laws and regulations are not perfect in the process of integrating AI into ideological and political education in colleges and universities. AI is like a “double-edged sword” with both convenience and risk. In ideological and political classroom teaching, how to protect students’ personal information from being leaked has become a major difficulty. In the teaching process, a large number of students’ basic information is collected, so that students are passive in the digital space, and all information is stored in the form of data in the background of AI. It is important to improve laws and regulations, ensure students’ information security, let students have a sense of trust in AI, cooperate with AI to integrate into the teaching mode of ideological and political teaching, give full play to AI’s maximum role in ideological and political teaching, and improve students’ learning quality.

In the process of integrating AI into ideological and political education in colleges and universities, interdisciplinary talents are lacking. “AI in Education: Challenges and Opportunities for Sustainable Development” points out that the market for AI in education will develop rapidly, and AI will have a direct impact on learning styles, learning opportunities, learning quality, student abilities, and teacher development, as well as pose new challenges to educational equity, educational decision-making, educational policies, privacy, and ethics<sup>[8]</sup>. In essence, artificial intelligence is a cross-integration discipline, which is a service technology with big data, deep learning, and strong computing power<sup>[9]</sup>. Ideological and political education under artificial intelligence has higher requirements for the comprehensive level of ideological and political workers, requiring them to master the law of ideological and political education while also having certain abilities of data combing, analysis, and judgment. Many can understand the purpose and requirements of intelligent ideological and political education. However, the reality is that the workers engaged in ideological and political education do not have the above computer skills, and the IT workers with excellent skills may not have the ability of ideological and political education. The integrated development of AI and ideological and political education is in urgent need of outstanding talents with interdisciplinary abilities.

## **4. The countermeasures of integrating AI into ideological and political education in colleges and universities**

### **4.1. Improving relevant systems and building information-based teams in colleges and universities**

In order to make good use of information technology to improve teaching quality, colleges and universities should do a good job in the construction of relevant systems and provide support for the integration of AI into ideological and political teaching. At the school level, a new type of evaluation system should be established to achieve refined teacher-student mutual evaluation with the help of AI and to help teachers establish more detailed and scientific evaluation standards by digital means, so as to practice the great mission of education.

Secondly, it is necessary to establish a teacher training system, so that teachers can master the relevant skills of using AI under complete and systematic training. The use of artificial intelligence can help educators rapidly expand their knowledge and improve their own quality, so as to devote more time and energy where needed <sup>[10]</sup> and solve the problems of ideological and political teachers in teaching. The school promotes the research and development of the ideological and political education platform with the characteristics of the school, and the relevant technical personnel should abide by the rules and regulations of the school, strictly abide by the moral bottom line, and protect the privacy and security of students when developing and maintaining the platform. Teachers and relevant technical staff form a joint educational force, build an information-based teaching team, promote the development of AI-integrated ideological and political teaching, and help students grow up safely and healthily.

#### **4.2. Rethinking ideological and political teachers' positioning and improving their professional quality**

The integration of AI into ideological and political classes in colleges and universities has a strong impact on teachers' teaching methods and teaching activities. Teachers should rethink their positioning under the new teaching mode.

Firstly, teachers should change their teaching ideas and build a democratic and harmonious teacher-student relationship. With the opening and sharing of network resources, teachers are no longer the only ones holding teaching resources. Weakening the authority of teachers in traditional teaching can promote a more equal and harmonious relationship between teachers and students. By integrating AI technology into ideological and political teaching and building an online learning platform, students can relieve their tension, express their true attitudes and ideas in a virtual network environment, and promote equal dialogue between teachers and students. Students become the protagonists of classroom teaching, which suggests that teachers should change their educational philosophy, build an equal and democratic teacher-student relationship, obey the democratization trend of AI integrating into ideological and political teaching in colleges and universities, and use new teaching concepts to impart knowledge to students.

Secondly, schools should pay close attention to training teachers to master relevant teaching techniques. The integration of AI into ideological and political teaching in colleges and universities is a cross-border product of the new era. Therefore, teachers should not only have excellent professional quality but also master relevant information technology in order to better use AI to improve teaching quality and efficiency. Colleges and universities should provide training opportunities and build training platforms for ideological and political teachers to master relevant skills as soon as possible. In particular, it is necessary to do a good job in training and ideological work for elderly teachers, eliminate their rejection of emerging technologies, adapt to new intelligent teaching methods, take the initiative to meet new teaching reforms, and successfully complete the glorious mission of teaching and educating people.

Thirdly, teachers should control the combination of AI and ideological and political teaching. AI has brought a lot of convenience to teachers' teaching work. For example, teachers can issue multiple-choice questions to students on the online platform, and students can complete and upload them. AI system will automatically judge the test paper, and calculate the error rate of students to find out their knowledge blind spots. However, today's artificial intelligence is still weak, and its development level is still in the stage of "no artificial intelligence, no intelligence" <sup>[11]</sup>. Because of this, the limitations in the application of education and teaching call for teachers to exert human intelligence. Ideological and political teaching is a complex project to educate people for the Party and the country. The unique role of ideological and political teachers in the process

of education and teaching can never be replaced<sup>[12]</sup>. Therefore, teachers should control the use of AI, not over-rely on AI, cooperate with each other, and jointly complete the teaching work for students in the intelligent era.

### **4.3. Making full use of AI technology and adopting intelligent teaching methods**

The development of AI technology has changed the teaching form of ideological and political teaching and promoted the teaching environment and teaching methods of ideological and political teaching to change in the direction of intelligence. In addition to the use of traditional smart classrooms and multimedia facilities, teachers can use mobile phones, computers, and other electronic devices to build online learning platforms on mainstream social software such as WeChat and QQ. Teachers should make full use of online educational resources, select high-quality learning materials, share resources with students, and help students consolidate knowledge points and expand their scope of knowledge. This kind of guidance method of integrating AI into ideological and political teaching not only breaks the limitation of time and space but also reduces the pressure of teachers' guidance. At the same time, it can weaken students' resistance to teachers' guidance, improve students' interest in learning, and cultivate students' ideological and political discipline accomplishment.

### **4.4. Making full use of AI technology to promote the precision of teaching evaluation**

Students are the recipients and the direct embodiment of teaching results, teaching quality evaluation should pay more attention to students as a group<sup>[13]</sup>. The integration of AI technology into political teaching can make the relationship between "teaching" and "learning" show visual characteristics, which will help promote the development of teaching evaluation in the later period. The integration of AI into the ideological and political teaching classroom can quickly make statistics on students' attendance, class participation, homework, etc. With the help of artificial intelligence technology, it can accurately grasp the psychological and ideological status of contemporary students as a whole, so as to implement education in a targeted way and improve the effectiveness of ideological and political education<sup>[14]</sup>. At the same time, AI provides detailed background data according to students' situations, and teachers can make full use of these data to formulate detailed evaluation criteria, evaluate students from multiple dimensions such as knowledge mastery and learning attitude, and form a more comprehensive evaluation. In addition, the unique visual characteristics of AI can also allow students to directly understand their own learning status. Each person makes his or her own curriculum and learning plan, and the evaluation is also individualized<sup>[15]</sup>. At the same time, it allows students to form self-evaluations of their ideological and political learning, provides learning motivation, stimulates students' learning enthusiasm, and improves their independent learning ability. The integration of AI into ideological and political teaching can also evaluate the quality of teachers' teaching. Artificial intelligence technology can be used to accurately analyze teachers' teaching attitude, teaching organization, personal emotions, and teaching speed during classroom teaching. Teachers can understand their own teaching status and teaching deficiencies through analysis of the results, so as to improve the quality of classroom teaching<sup>[16]</sup>.

Artificial intelligence not only changes human cognition but also has a profound impact on human learning and life. The integration of AI and education is a new development trend. Ideological and political teachers in colleges and universities should also follow the trend of the times, promote the deep integration of AI and ideological and political education in colleges and universities, form a situation of man-machine cooperation and mutual support, and jointly promote the comprehensive development of students' comprehensive quality. College teachers strictly follow the nature of ideological and political education, seize the ideological and political leading role, and finally achieve the perfect integration of AI and ideological and political teaching, and jointly provide a good situation for students' ideological and political learning.

## Disclosure statement

The author declares no conflict of interest.

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