

# Exploring the Risk Mechanisms and Preventive Countermeasures of College Students' Ideological Education Innovation in the Age of Artificial Intelligence

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**Abstract:** At present, artificial intelligence technology provides an important breakthrough for the innovation and development of China's education field, and the emerging various types of artificial intelligence technology are profoundly and continuously affecting the learning life of college students, and the association between the development of the ideological education field and the application of artificial intelligence technology is becoming more and more close. Ideological education as an important topic of ideological and political education and teaching work, artificial intelligence technology for college ideological education has brought a new picture, to realize the intelligent integration of artificial intelligence technology into the ideological education of colleges and universities, to drive the high-quality development of ideological education. It is of great significance to analyze the risk mechanism and preventive countermeasures for college students' ideological education from the perspective of the application of artificial intelligence.

**Keywords:** Artificial Intelligence, Ideological Education, University Students, Risk Prevention.

**Disciplines:** Education.

**Subjects:** Curriculum Development.

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## 1 PROPOSING THE PROBLEM

China attaches great importance to the profound impact of artificial intelligence on education, and actively promotes the deep integration of artificial intelligence and education. Along with the continuous development of AI technology, the way of ideological education will also usher in profound changes. The application of artificial intelligence technology in the field of ideological education will gradually have an impact on the education method, education process, education evaluation and other aspects towards intelligence, and then promote the overall intelligent development of ideological education for college students. Of course, the road of ideological education empowered by AI technology is not destined to be a straight road, and the problems lurking in the process of its application should not be ignored. Educational practice in colleges and universities should seize the opportunity of the times, deal with the relationship between education and technology, and enhance the effectiveness of ideological education.

## 2 THE NECESSITY OF IDEOLOGICAL EDUCATION INNOVATION FOR COLLEGE STUDENTS IN THE ERA OF ARTIFICIAL INTELLIGENCE.

Artificial intelligence technology is profoundly affecting the development of the work and the practical effect of the ideological education in colleges and universities, putting forward brand-new requirements for the ideological education of college students in the new era, and exploring the way to hatch an innovative and precise educational model for the technical characteristics of artificial intelligence to realize educational innovation.

### 2.1 CONSTRUCTING A NEW IDEOLOGICAL DISCOURSE SYSTEM WITH ARTIFICIAL INTELLIGENCE TECHNOLOGY

Artificial Intelligence Technology as a Theoretical Guide for a New Ideological Discourse System. Artificial intelligence technology, as a strategic emerging scientific and technological progress, has brought significant changes to the

ideological education work of college students, but the risks and hidden worries hidden behind the technological changes are also very serious. How to study and resolve the problems between AI technology and ideological education is a key step to promote the quality and efficiency of ideological education for college students.

General Secretary Xi Jinping pointed out that “the Internet has been the main position, the main battlefield and the forefront of the current ideological struggle.”[1] As the booming development of AI technology makes the center of gravity of the ideological discourse struggle gradually shifted to the emerging science and technology field represented by AI technology. Therefore, how to use artificial intelligence as a technical support means to help construct an ideological discourse system that conforms to the mainstream of the new era is a proposition with significant contemporary value and practical implications. The construction of ideological discourse system for college students in the new era is to take the scientific system of Xi Jinping Thought on Socialism with Chinese Characteristics for the New Era as the core, take serving the masses as the starting point, and base on the great development pattern of the new era on the premise of adhering to the party nature and the people's nature, so as to make the ideological discourse of Chinese characteristics and the mainstream values it carries be rooted in the process of the formation of the college students' ideology through educational practice, and continue to contribute to the formation of the college students' ideology. The ideological discourse with Chinese characteristics and the mainstream values it carries will be rooted in the process of ideological formation of college students through educational practices, and will continue to exert a force on the formation of college students' ideology.

With the wide application and rapid expansion of the new generation of artificial intelligence technology, the traditional college education model centered on knowledge teaching has been challenged, which is bound to profoundly affect the college education ecology. Focusing on the present, the relationship between artificial intelligence and college students' ideological education practice is becoming increasingly close, and it is gradually becoming an important issue in the innovation and development of ideological and political education.

## 2.2 INTEGRATION OF ARTIFICIAL INTELLIGENCE

### TECHNOLOGY INTO IDEOLOGY TEACHING

#### PRACTICE

Artificial Intelligence Technology as a Practical Direction for a New Ideological Discourse System. Before the emergence of emerging technologies represented by artificial intelligence, the knowledge intake of college students mainly focuses on the study of textbooks and the teaching of teachers inside and outside the classroom. With the rapid development of AI technology and the arrival of the information age, college students can more conveniently use

AI software to obtain rich learning resources, as long as the college students themselves are willing to pay time to learn the search tool for retrieval, they can obtain a variety of learning resources through AI technology. Convenient access to learning resources is not only conducive to the enhancement of college students' learning efficiency and initiative, but also helps to further enrich their ideology. Therefore, it is of great significance to grasp the relationship between artificial intelligence technology and the intelligent integration of ideological education work to realize high-quality ideological and political education work.

Human consciousness is an abstract conceptual existence, and it is difficult to realize the concrete and figurative appearance. And technology is essentially a dynamic reflection of human self-consciousness, embodying the practical choices made by the subject of use in accordance with its own value goals. Therefore, artificial intelligence, as a technical means, provides an opportunity for ideological educators to understand and grasp the development trend of students' subjective concepts. Ideological education, as a practical activity of human subjectivity, is a key aspect in determining the value orientation of college students, which is based on the logical starting point of the realistic needs of human beings, and takes the realization of the comprehensive development of human beings as the ultimate goal. Therefore, as the ultimate recipient of ideological education, the individual requires ideological education to adhere to the humanistic theory, and always embed the concept of “human-oriented” in the whole process of education. Artificial intelligence, as a product of human wisdom, is essentially a method or a tool for serving human beings, aiming to satisfy the real needs of human beings in the practical process of recognizing the world and transforming the world.

## 3 3.THE RISK MECHANISM OF IDEOLOGICAL EDUCATION INNOVATION FOR COLLEGE STUDENTS IN THE AGE OF ARTIFICIAL INTELLIGENCE

Throughout history, many technologies have been 'double-edged swords', which on the one hand can benefit society and people, and on the other hand can be used by some people to jeopardize the public interest of the society and the interests of the people. Artificial intelligence technology, as a strategic and emerging scientific and technological progress, has brought significant changes to the ideological education of college students, but the risks and worries hidden behind the technological changes are also very serious. How to study and resolve the problems between AI technology and ideological education is a key step in promoting the quality and efficiency of ideological education for college students.

TABLE 1 RISK HAZARD CHART

| The Risk Mechanism                                                       |                      |                          |                                |
|--------------------------------------------------------------------------|----------------------|--------------------------|--------------------------------|
| Challenges to Adherence to the Mainstream Ideology's Subjective Position | lack of confidence   | depletion of value       | polarization of public opinion |
| Technology space has hidden worries.                                     | "Information Cocoon" | algorithmic intervention | information divide             |

### 3.1 CHALLENGES TO ADHERENCE TO THE MAINSTREAM IDEOLOGY'S SUBJECTIVE POSITION

Marx pointed out that “in our time, every thing seems to contain its own opposite. We see that machines have the magical power to reduce human labor and make it more productive, yet they cause hunger and excessive fatigue.”<sup>[2]</sup>In educational practice, if the educated subject is not interested in the positive shaping of ideal beliefs, the intelligent algorithm will collect negative feedback, and thereafter filter such information or push it at a very low frequency, in this way, the educated subject will consider the one-sided information that has been received by long-time subconsciously to be the objective fact, which will lead to a great reduction in the effect of the education of college students' ideal beliefs. The complexity of AI ethics makes it hard to pin down what to teach, how to teach it, and how to assess its effectiveness. <sup>[3]</sup>The terrible thing about the information cocoon is that it will make the subject strongly influenced by the lack of clear learning and life goals, easy to spend a lot of time in the chaotic and disorderly network information, rather than for learning and growth; lack of interests and hobbies, not interested in real life activities and things, and turn to spend a lot of time on the network entertainment and recreation and so on, which is not conducive to the realization of a high level of education and guidance, and will impede the ideal beliefs of college students. It hinders the formation of ideal beliefs of college students.

### 3.2 TECHNOLOGY SPACE HAS HIDDEN WORRIES.

In a sense, science and technology is like a wild horse, once the new technology is born, it will be traveling in the self-development of the logical track, the power of human subjective will is difficult to completely tame it.<sup>[4]</sup>The current AI technology-led algorithmic recommendation environment is surrounding college students in their online learning and life, and algorithmic recommendation is one of the tools of AI technology manifest form, playing an important intermediary role in the process of data collection, analysis

and dissemination. Ethical concerns, such as algorithmic bias, transparency, and accountability, further complicate its integration into academic contexts. Moreover, issues of social class and equitable access to AI tools highlight the need for thoughtful policy development.<sup>[5]</sup> Due to the lack of knowledge of AI algorithms, the formation of college students' ideology may be influenced by means of the very algorithms tailored by his own preferences, a set of rationale logic that poses a number of potential digital risks to college students' ideological education work. Big data algorithms build a unique big data model of each user through the collection and analysis of user information, and according to this big data model depicts the digital image of the user. The digital image is essentially a process of rearranging user data, which is categorized by artificial intelligence and then redistributed on top of the individual user, transforming the original vivid and real user into a cold individual label. The transformed data confines the user's personality to a code defined by simplified digital labels, a digital act that inevitably has an impact on the ideological formation process of college students.

## 4 PREVENTIVE COUNTERMEASURES FOR THE INNOVATION OF COLLEGE STUDENTS' IDEOLOGICAL EDUCATION IN THE ERA OF ARTIFICIAL INTELLIGENCE

In the context of the booming development of artificial intelligence technology, the intelligent change of ideological education for college students is a key topic of concern in the academic world. Educators should seize the historical opportunity to promote artificial intelligence as an important driving force and technical support means for ideological education for college students.

### 4.1 DEFINE THE VALUE LEADERSHIP AND CONSTITUTE AN EDUCATION-LED PATTERN OF “PROMOTING INTELLIGENCE AND EDUCATION”.

Clearly define the subjective positioning of ideological educators, and adhere to the value orientation of technological services to educate people. Young people's lofty ideals and firm beliefs are the indestructible driving force of a country and a nation. And in the process of transforming the identity positioning of ideological educators, it is necessary to firmly grasp the position of subjectivity and give full play to the enthusiasm, initiative and creativity of teachers. Artificial intelligence technology does not have a moral stance and ethical awareness, and it is unable to make correct screening and value judgments on the vast amount of Internet information, so it is necessary for ideology educators

to use technical means to judge and integrate information, and to help students build a knowledge system that meets the requirements of ideology education and the correct three views, so that they can maintain their ability to think clearly and make judgments in the complex public opinion environment.

The important positioning of ideological education in colleges and universities also puts forward higher requirements for educators, and colleges and universities should make efforts to improve the technical literacy of teachers of ideological education, learn in-depth knowledge and skills of AI technology, and fully externalize the technological advantages of AI in the classroom of ideological education. AI can be used by instructors during the design of a new course or in the process of incrementally improving a course every semester. [6] Colleges and universities can periodically offer AI technology training, design specific and informative training content based on the needs of ideology educators, focus on AI technology, and improve the theoretical level and technical ability of educators through hands-on training, so as to make them proficient in the operating skills of AI systems. More importantly, through application and effectiveness analysis, we verified that AI education datasets developed based on constructivism can: connect students' prior knowledge with real-world experiences, deepen understanding of AI model learning processes, and provide authentic data-driven computing experiences - collectively contributing to comprehensive AI literacy enhancement. [7]

On the other hand, colleges and universities should focus on improving the AI teaching thinking of teachers of Civics and Political Science courses, teachers should consciously integrate AI technology into their teaching, follow the characteristics and laws of information dissemination in the age of AI, and actively draw on intelligent thinking, technology and operation modes. German philosopher Karl Jaspers once proposed in the book "What is Education" that "education is the education of the human soul, not a collection of rational knowledge and understanding" [8], and the role played by teachers in the formation of students' ideals and beliefs is irreplaceable, but along with the high-speed development and application of artificial intelligence technology, teachers also need to Fully learn and absorb new skill samples. With the will of continuous learning, and the emotion and interest of being an educator, they can fully utilize the instrumental attributes of AI, as well as reflect the subjective characteristics and values of educators themselves.

## **4.2 IMPROVE THE INSTITUTIONAL SYSTEM TO GUARANTEE THE DEEP INTEGRATION OF AI AND IDEAL BELIEF EDUCATION**

A sound institutional system is an important cornerstone to ensure that AI plays a role in the education of ideals and beliefs in colleges and universities, as well as an important

support for the maintenance of value orientation, technical support and information dissemination. Colleges and universities, as the main position for establishing moral education, need to pay great attention to this. The government and education authorities should issue relevant policies to clarify the status and role of AI in ideal and conviction education, and provide policy support and guarantee for the deep integration of AI and ideal and conviction education. Institutional construction is always on the way, artificial intelligence as a new thing new technology must have supporting system construction and other superstructure, therefore, to ensure the effective application of artificial intelligence in ideological and political education in colleges and universities, it is necessary to have a competent system to do a good job of support.

Due to the various forms of information generated by AI, the values of college students are easily influenced by the internal and external environments, so we should actively guide college students with negative positions to transform their thoughts and understanding, further improve the research and evaluation of public opinion and emergency response, and do a good job of ideals and beliefs publicity, so that we can standardize the process of crisis intervention and thus establish a comprehensive early warning mechanism. As a major information consumption group, college students are easily trapped in the "information cocoon" created by artificial intelligence in the mixed information scene. In the face of the new problems arising in the new development stage of college students' idealistic belief education, we should strengthen the analysis of public opinion, educate students to recognize the characteristics of network information dissemination, and guide them to correctly assess network information and distinguish the authenticity and reliability of information generated by artificial intelligence. The research mechanism is front-loaded in the construction of the institutional system, and regular mapping visits are organized within the students in the form of questionnaires, sample questioning, etc., which can adequately identify the problem points and collect the risk points. Guiding educators to maintain a keen sense of crisis at all times, to do in-depth and comprehensive thinking on specific issues, accurate and effective risk warning effective policy, and improve the efficiency of the ideals and beliefs education. [9]

## **4.3 DEEPEN TECHNICAL SYNERGY TO CREATE AN EFFECTIVE TOOL FOR IDEOLOGICAL EDUCATION.**

In today's world, the boundaries between virtual and real, online and offline are broken, and the real-time, borderless, and difficult-to-control characteristics of the age of smart media are becoming more and more obvious. [10] The cultivation of college students' ideal beliefs in the era of artificial intelligence requires the construction of an intelligent college ideal belief education platform and the building of a bridge for the intelligent integration of artificial



intelligence technology and college ideal belief education.

To realize the practical application of artificial intelligence in ideological education in colleges and universities, promoting the construction of an intelligent ideological education platform for colleges and universities is an important technical guarantee, and educators should focus on building a solid education platform as a bridge for the intelligent integration of artificial intelligence technology and ideological education in colleges and universities. On the one hand, colleges and universities should build a perfect intelligent education space, the traditional classroom in the past due to the lack of hardware equipped with artificial intelligence functions, so it is more difficult to create an intelligent scene that meets today's educational needs. Therefore, when the ideological teaching mode changes, the supporting teaching facilities should also be updated and upgraded to meet the new educational needs. Schools should take the lead to increase investment in building traditional classrooms into intelligent educational spaces with interactive terminals, intelligent equipment, high degree of interconnectivity and other advanced features, to provide matching technical support for the realization of AI technology-enabled ideological education and teaching. On the other hand, colleges and universities should focus on improving the AI teaching thinking of teachers of ideology courses, and teachers should consciously integrate AI technology into their teaching so as to improve the teaching quality of ideology education.

The application of artificial intelligence in the field of ideological education in colleges and universities is still in the exploratory stage, and new applications are constantly being developed and put into use, all of which proves the important position of artificial intelligence and ideological education in Xi Jinping's new era of socialist education with Chinese characteristics. In the future, the application of AI technology will unfold a broad picture, realizing a wide range of applications in all aspects of ideological education. We need to continue to conduct in-depth research and explore its potential to contribute to the development of ideological education in colleges and universities, and contribute to the cultivation of builders and successors in the new era and the promotion of comprehensive human development.

## 5 CONCLUSION

In summary, the intelligent transformation of ideal concept education in colleges and universities is the process of empowering and reshaping ideal concept education with new artificial intelligence technology, and then forming a new mode of parenting and innovating a new pattern of parenting. The coupling of artificial intelligence and ideal conviction education in the education subject, education medium and education ring provides the appropriateness and feasibility for artificial intelligence to empower ideal conviction education in the new era. In the practical exploration of ideal belief education, colleges and

universities should insist on taking students as the main body, guide educators to actively learn and master AI technology, understand the intrinsic correlation between AI and ideal belief education, gain an insight into its comprehensive empowerment of ideal belief education in colleges and universities at the levels of content, medium, structure, etc., and explore the innovative practice of ideal belief education in colleges and universities in terms of value leadership, digital synergy and system due to the situation and innovation, and effectively integrate the development potential of artificial intelligence with the education of ideals. The potential energy of AI development will be effectively transformed into the innovative kinetic energy of ideal and conviction education.

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## REFERENCES

- [1] Xi, J. P. (2021). Excerpts from the important discussions on building a strong cyber nation (p.50). Central Party Literature Press.
- [2] Marx, K., & Engels, F. (2012). Selected works of Marx and Engels: Volume 1 (p. 776). People's Publishing House. (Original work published 2012)
- [3] Lucas J. Wiese, Indira Patil, Daniel S. Schiff & Alejandra J. Magana. (2025). AI ethics education: A systematic literature review. *Computers and Education: Artificial Intelligence*, 8, 100405-100405.
- [4] Long, B. X. (2023). Educational reform and its direction in the era of artificial intelligence. *Nanjing Social Sciences*, (3).
- [5] Sergio Fernando Juárez & C. Kyle Rudick. (2025). Imagining futures for communication education: AI, education, and the coming crises. *Communication Education*, 74(1), 123-125.
- [6] Brandon Mattalo. (2024). Artificial Intelligence: The Future of Pedagogy. *Journal of Legal Studies Education*, 41(1), 49-71.
- [7] Kim, S. K., Kim, T. Y., & Kim, K. (2025). Development and effectiveness verification of AI education data sets based on constructivist learning principles for enhancing AI literacy. *Scientific Reports*, 15(1), 10725-10725.
- [8] Jaspers, K. (1991). What is education? (J. Zou, Trans.). Shanghai SDX Joint Publishing Company. (Original work published 1991)
- [9] Chen, Y. Y., & Xu, C. C. (2023). "Six-in-one" linkage: Exploring targeted cultivation of college students' ideals and beliefs in the intelligent media era. *Modern Education Science*, (5), 91-97.
- [10] Hou, S. X. (2019). Artificial intelligence and youth ideological guidance. *Party and Government Forum*, (11), 35-39.