

# Application and Practice of Artificial Intelligence Technology in Ideological and Political Education in Colleges and Universities

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## Abstract

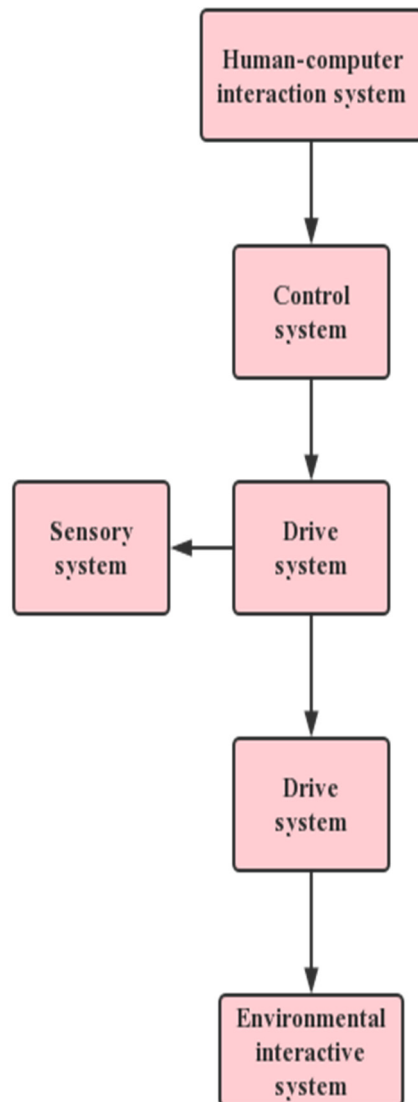
Colleges and universities build artificial intelligence ideological and political teaching systems, and make full use of modern digitalization to make ideological and political education more intelligent. Ideological and political education in colleges and universities uses artificial intelligence technology to build a high-quality ideological and political teaching structure, and combines computer multimedia technology. Realize the vividness of classroom teaching. The distributed intelligent teaching system based on artificial intelligence technology can solve the phenomenon of obscure and boring classroom knowledge in the process of ideological and political teaching, and further integrate ideological and political teaching information to form a systematic ideological and political database center. Provide rich teaching resources for ideological and political teaching, and promote the further improvement of the ideological and political education system in colleges and universities.

**Keywords-***Artificial intelligence technology; colleges and universities; ideological and political education; processing model analysis*

## 1. INTRODUCTION

At present, the most widely used artificial intelligence technology is in the education and teaching industry. The application of artificial intelligence technology can not only enrich the ideological and political teaching methods in colleges and universities, but also promote the optimal allocation of teaching resources, and optimize and upgrade the entire distributed intelligent education system. The four major application forms based on artificial intelligence technology include intelligent teaching system, automatic evaluation system, robot education system, and intelligent teacher system. These intelligent teaching

systems are customized according to actual teaching needs, and are intelligent teaching products formed by combining with other modern technologies. This kind of teaching system can help teachers quickly adapt to intelligent teaching, improve teachers' teaching ability, and constantly innovate teaching methods. The design and development of different teaching systems inject new vitality into ideological and political teaching in colleges and universities. Intelligent ideological and political teaching cannot be separated from the support of artificial intelligence technology. Therefore, artificial intelligence plays a huge advantage in ideological and political teaching.

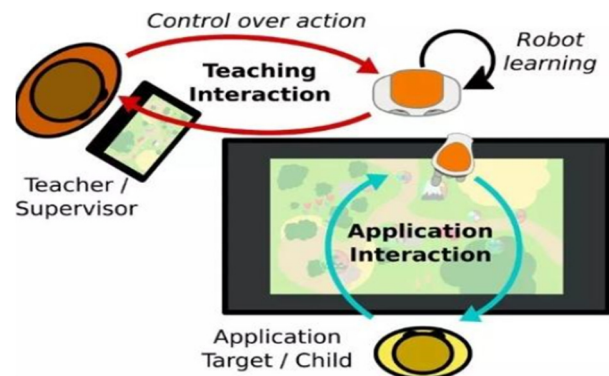


**Figure 1.** Components of an intelligent system

## 2. INTELLIGENT TEACHING SYSTEM

As the development direction of the future teaching system, the network distributed intelligent education system has the advantage that it can break through the shackles of traditional ideological and political teaching, and students from different times and regions are unified in a virtual and intelligent learning scene. Power, create a good learning environment for students, improve students' learning initiative. In the past, ideological and political teaching only focused on the learning situation of the entire student group and could not provide personalized guidance and assistance. Colleges and teachers could not keep abreast of students' learning dynamics at any time. In the network distributed intelligent education system, professional learning guidance can be provided according to the learning needs of each student, helping students to quickly establish a learning thinking model and better grasp the learning content, thereby greatly reducing the waste of educational resources and optimizing the allocation of

thinking Political teaching resources realize the circular development of data information.



**Figure 2.** Intelligent system transformation model diagram

## 3. IDEOLOGICAL AND POLITICAL AUTOMATIC EVALUATION SYSTEM

Ideological and political teaching evaluation is one

of the important links in teaching activities. The ideological and political automatic evaluation system can achieve objective, accurate and reliable evaluation results, provide real-time learning feedback for colleges and universities and teachers, greatly reduce the burden on teachers and provide real factual basis for teaching decision-making. During the learning and training process of text editing, spreadsheet data processing, mail, presentation and web skills, the ICT automatic evaluation system builds an information model through three steps of information acquisition, knowledge reasoning and comprehensive evaluation, dynamically tracks the user's operation behavior, and uses The process of diagnosis, evaluation and feedback greatly improves the learning efficiency. At present, the programming languages that have achieved automatic evaluation at home and abroad include Java, C/c++, Python, Pascal, as well as assembly language, scripting language and database query language.

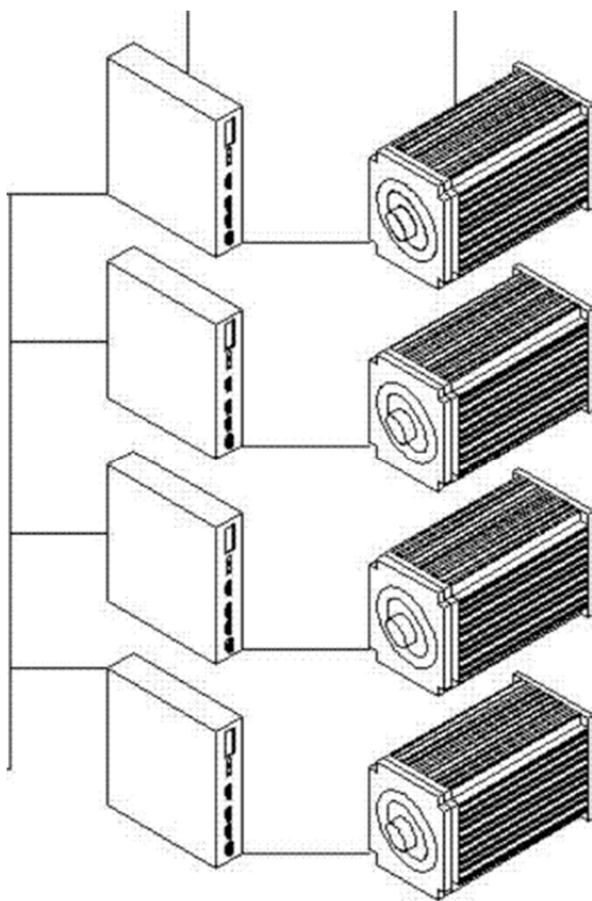


Figure 3. Automated Assessment System

#### 4. ROBOT EDUCATION SYSTEM

Robot education system combines engineering technology and artificial intelligence technology. Designers program robots by integrating science and technology, educational concepts, and related educational knowledge. Therefore, it is possible to develop an intelligent robot focused on educational

teaching. It is thanks to the development of robotics education systems that technological advancements have been driven, as designing robots with high complexity and strong expertise requires the help of different specialized techniques to complete. Using a robotic education system in teaching can improve students' thinking ability and cultivate team awareness.

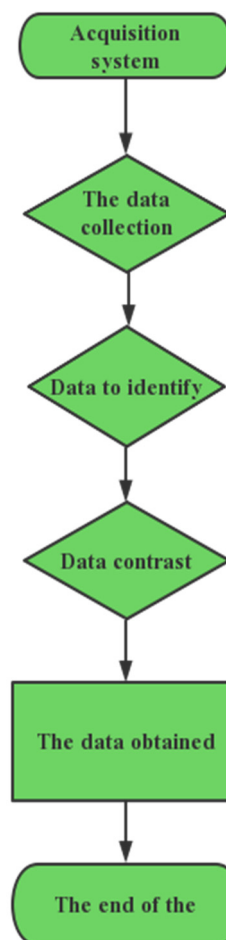


Figure 4. Robot control method

#### 5. INTELLIGENT TEACHER SYSTEM

The intelligent teacher system is derived from computer-assisted teaching. The intelligent teacher system can simulate the behavior and teaching mode of teachers, and provide targeted teaching assistance to students. The intelligent teacher system mainly includes three aspects. The first is the intelligent domain model, which includes the teaching experience and teaching methods of many teaching experts, and there are many professional knowledge concepts and learning directions. The manifestations of the intelligent teacher system are all composed of teaching framework, teaching objects, network resources, teaching structure, etc. The main function of the intelligent teacher system is to quickly complete the reasoning of knowledge computers and processes in ideological and political teaching. The second is the teacher model. The teacher model is to

plan the overall learning goals of the students. The teacher infers the students' learning style, ideological level and learning ability according to the students' learning dynamics. The last is the learner model. The intelligent domain model, the teacher model and the learner model interact and complement each other to promote the further development of teaching.

## 6. CONCLUSION

Artificial intelligence technology subverts traditional ideological and political teaching methods with intelligent teaching models, and also uses intelligent robots to help students simulate ideological and political situations to enhance students' learning experience. The flexible application of artificial intelligence technology in college ideology and politics has improved the teaching initiative of ideological and political classrooms, combining artificial intelligence technology with college ideology and politics, giving full play to the application of modern science and technology in education, and promoting the sustainable development of modern technology. The application of artificial intelligence technology not only promotes the digital and intelligent development of ideological and political teaching in colleges and universities, but also the intelligent teaching system under artificial intelligence technology establishes a comprehensive digital model for ideological and political education in colleges and universities. The direction of ideological and political education, improve the quality of ideological and political education, and promote the further development of ideological and political education work.

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