# Application of Big Data Technology in the Teaching Model of Ideological and Political Theory Course in Agricultural and Forestry Colleges

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**Abstract:** The advantages of big data technology and its wide application have pointed out a new direction for ideological and political education in colleges and universities in the era of network information. Among them, education content, education mode, evaluation and feedback of education effect can be refined and individualized to the maximum extent, and then the ideological and political education subject's thought and behavior can be predicted to the greatest extent. To promote the application of big data technology in Ideological and political education in agricultural and forestry colleges under the new situation, we should deepen and improve the content system of big data ideological and political education. Pay attention to the acquisition and collation of data, and ensure the data exchange of various departments of Ideological and political education. Emphasis should be placed on the synchronization of educators' abilities with the times and the cultivation of an educational contingent with comprehensive development.

#### 1. Introduction

Under the background of the great development of network information technology, data makes phenomena become quantifiable information elements. By re-examining the data, we have found a new method system to understand the real world. The advantages of big data technology and its wide application also point out a new direction for ideological and political education in colleges and universities in the information age. As the frontier of cultivation, development and inheritance of social mainstream ideas, values and culture, universities is the most active bridgehead with the most intensive knowledge and the fullest use of network information technology. At the same time that the steps of informationization and intelligent campus construction in domestic universities are speeding up, we should fully apply big data technology to the field of Ideological and political education, improve the accuracy and effectiveness of ideological and political education in personnel training, and better play the role of ideological fortress and educating people in colleges and universities.

## 2. Opportunities of big data technology for ideological and political theory teaching in agricultural and forestry colleges

In the era of big data, by mining data and analyzing the results of data correlation, we can judge and predict the future development trend of things. Because this prediction is based on reasonable prediction of scientific data, it has a strong reference value.

# 2.1. Big data promotes the diversification of ideological and political education forms in agricultural and forestry colleges

Ideological and political education in colleges and universities Based on multivariate and massive data achieves resource sharing. Teachers and students can search information from multiple fields and perspectives anytime and anywhere. Teaching will no longer be confined to the traditional classroom taught by teachers, which greatly enriches students' information horizons and broadens their thinking horizons. In addition, with the rapid development of online learning mode with the help of big data technology, a new mode of replacing classroom teaching has gradually emerged, and ideological and political education has gradually moved from flat textbooks to

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network platforms. In the process of acquisition, mining, analysis and application of various data resources, it can also enhance its ability of independent thinking and deepen the understanding and understanding of knowledge.

# 2.2. Ideological and political education in agricultural and forestry institutions guided by big data is more predictable

The core of using big data is its predictability. On the basis of mining and summarizing a large amount of data and information for college students, through the analysis of computer and mathematical statistics, we can grasp the macro-characteristics of the whole student group, obtain the law of development, predict the development trend, and then predict the probability of relevant events, and carry out timely early warning and action of group behavior.

### 2.3. Ideological and political education in agricultural and forestry institutions under the guidance of big data is more individualized and accurate

Before the emergence of big data technology, traditional ideological and political education often relied on educators' indirect experience and perceptual knowledge, or through the collection and analysis of limited data to get results. These results are difficult to accurately grasp the object of education and accurately assess the effectiveness of education. Educational informationization makes the process of education pay more attention to the individualization of education, the refinement of management and the scientificalization of decision-making.

### 3. Current situation of developing ideological and political theory course by using big data technology in agricultural and forestry colleges

At present, many colleges and universities in China carry out the ideological and political theory education model under the big data technology. In order to understand the application of the big data technology, this paper carries out data investigation and analysis of its application status.

#### 3.1. Undergraduates' cognition and application of big data technology

The survey shows that 3% of college students are very familiar with the application of big data technology in Ideological and political theory education. 19% of college students generally understand it. Seventeen percent of college students choose "not very familiar, but they have heard about it", while 61 percent choose "not knowing at all, never heard of it". This shows that the former agricultural and forestry colleges and universities are only exploring, are looking for suitable teaching mode, not widely publicized in the school, so it needs a process to make big data really applied to colleges and universities, as shown in figure 1 below.

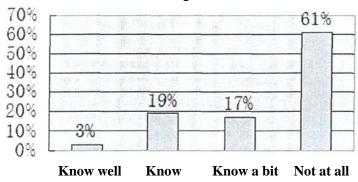
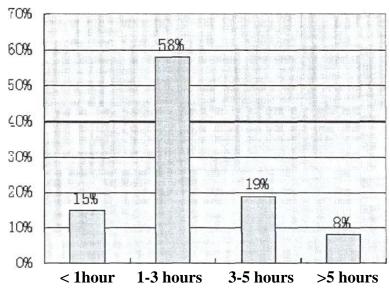


Figure 1. Undergraduates' cognition of big data technology

#### 3.2. Application of big data technology by college students

According to statistics, 15% of college students spend less than one hour a week on the big data learning platform; 58% spend between one and three hours a week; 19% spend between three and five hours a week; and 8% spend more than five hours a week. From Figure 2, it can be seen that 85% of college students spend more than one hour a week to study, which shows that the burden of

using big data technology to learn is not lighter than that of traditional classroom. The theoretical course of Ideological and political education in the traditional classroom is two sessions a week, and some schools only have four sessions at most. Most of the students study in the big data technology platform for three hours, and some even reach five hours. Their learning tasks are slightly heavier than those in the traditional classroom.



**Figure 2.** Application status of big data technology by college students

### 4. Application strategy of big data technology in ideological and political education of agricultural and forestry colleges

#### 4.1. Deepen and perfect the content system of ideological and political education of big data

The application of big data technology should be fully embodied on the basis of enriching the content system of Ideological and political education. According to the different characteristics of different majors and students, teaching methods are designed with pertinence and precision, and curriculum content and curriculum plan are adjusted. In view of the effect of teaching implementation and the existing problems in teaching implementation, follow-up evaluation and feedback are carried out to optimize the integration effect of Ideological and political education and big data technology.

#### 4.2. Guarantee the data exchange of ideological and political education

Massive data is the basic premise for the application of big data technology in ideological and political education in colleges and universities. This requires the ideological and political education departments to attach great importance to the acquisition and collection of data from the source, expand the sources of data, deepen the way of data collation, and realize the sharing of data to meet the requirements of teachers and students in the process of learning and communication, as well as the mastery of data by managers.

#### 5. Conclusions

Big data technology brings new opportunities for the development of Ideological and political theory courses in agricultural and forestry colleges, but also brings some challenges. To introduce big data technology into Ideological and political theory courses in colleges and universities better, it should form a multi-joint effort and make joint efforts, to give full play to the advantages of big data technology for ideological and political theory courses in colleges and universities. Colleges should continue to deepen and improve the content system of ideological and political education with big data, attach importance to data acquisition and collation, and ensure data exchange among

different departments of ideological and political education. Emphasis should be placed on the synchronization of educators' abilities with the times and the cultivation of an educational contingent with comprehensive development.

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