

Retraction

Retracted: Dynamic Analysis of Deep Integration of Artificial Intelligence Based on High-Performance Computing for Ideological and Political Teaching Evaluation

Mobile Information Systems

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

References

- [1] Y. Li and D. Yao, "Dynamic Analysis of Deep Integration of Artificial Intelligence Based on High-Performance Computing for Ideological and Political Teaching Evaluation," *Mobile Information Systems*, vol. 2022, Article ID 4748544, 15 pages, 2022.

Research Article

Dynamic Analysis of Deep Integration of Artificial Intelligence Based on High-Performance Computing for Ideological and Political Teaching Evaluation

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At present, the teaching evaluation of courses is more and more important, and teaching evaluation is a main means to measure the quality of teachers' teaching. Among many course teaching evaluations, ideological and political courses have become the main position for teaching evaluation reform due to their unique strategic position and subject specificity. In the era of rapid development of science and technology, artificial intelligence combined with high-performance computing has made frequent progress in various fields. The trend of development is unstoppable. Therefore, based on the current problems in the evaluation of ideological and political teaching, this paper proposes an artificial intelligence theory based on high-performance computing. This paper will closely integrate it with the evaluation of ideological and political teaching. In the research process of this paper, high-performance computing, artificial intelligence, and ideological and political teaching evaluation are explained in detail. This paper focuses on the introduction of artificial intelligence algorithms for high-performance computing. Finally, this paper proves the feasibility of this method in the evaluation of ideological and political teaching through the actual integration experiment with the evaluation of ideological and political teaching and proposes a series of teaching evaluation methods. Finally, the experiment shows that our new evaluation method can pay attention to 56.7% of students' comprehensive development and 63.7% of students' personal quality.

1. Introduction

The ideological and political course is a course dedicated to the all-round development of people. It focuses on people's thoughts and positions and guides people's values in terms of right and wrong. However, in the traditional ideological and political teaching process, teachers cannot obtain correct evaluations in a timely and efficient manner. At the same time, we learned that at present, most schools do not have mature teaching evaluation methods, and the evaluation of teaching quality is still in the manual stage. In the case of many evaluation subjects, subjective evaluation results, and complex data, we introduce high-performance

artificial intelligence for evaluation attempts. By comparing the traditional manual evaluation methods, we propose a high-performance artificial intelligence algorithm, and on this basis, it is deeply integrated with teaching evaluation. Based on this algorithm, we can realize the dynamic adjustment of teaching evaluation [1, 2]. It allows teachers to correct and adjust the teaching process in time and promotes the teaching team to constantly clarify their responsibilities and remember their original intentions. At the same time, with the new teaching evaluation system and continuous adjustment of teaching, students' self-development and students' personal quality will be greatly improved. The evaluation and adjustment of ideological and political teaching can

play a huge role in the innovation of ideological and political courses. It contributes to the development of high-quality teachers and a highly innovative student body.

The innovation of this paper is as follows:

- (1) This paper expounds the combination of high-performance computing and artificial intelligence and its integration with teaching evaluation. This is a breakthrough for artificial intelligence to enter teaching quality management, and it is also an enrichment for teaching reform plans
- (2) From the ultimate goal of the research, this research will help to improve the quality of education and teaching and cultivate talents. High-performance artificial intelligence provides data support for teaching evaluation and builds a bridge between theory and practice. To a certain extent, this is a booster for realizing the transformation from traditional educational concepts to new educational concepts

2. Related Work

Many scholars have provided a lot of references for research on artificial intelligence, high-performance computing, and ideological and political teaching evaluation.

Su et al. first introduced the progress of combining artificial intelligence and high-performance computing (HPC) in the field of scientific computing. They analyzed several typical scenarios and summarized the characteristics of corresponding computing resource requirements. They then further listed four general methods for integrating AI computing with traditional HPC, along with their key features and application scenarios. Finally, they also introduced the design strategy of Pengcheng Cloud Brain II Supercomputing Center in improving AI computing power and clusters [3].

Milojicic demonstrated accelerators for artificial intelligence (AI) and high-performance computing (HPC) on a large dataset. He identified a significant problem in the data and also used the trained network to virtually screen several benchmark sets [4].

D. Hagan and M. Hagan used statistical analysis of the weights of a single-layer network to select suitable descriptors. They used Monte Carlo cross-validation to provide confidence measures of network performance as well as identify problems in the data and added new chemical descriptors to improve network accuracy. They also used self-organizing graphs to analyze the performance of trained networks and identify anomalies [5].

Cecotti proposed a two-level hierarchical k -nearest neighbor classifier, along with a low-cost computer. He also made constructive comments on the development of low-cost computers and their practical operability in the future. This move allows us to rethink layers in image processing and pattern recognition. The first stage uses a Graphics Processing Unit (GPU) and the second stage uses a High Performance Cluster (HPC) [6].

Ju et al. observed changes caused by automated 3D data collection systems. They outline a primary surface profile-

(PSP-) optimized two-phase computational 3D crack detection method and propose a PSP-based data filtering algorithm. It is an innovative upgrade solution to the previous unbiased 3D pavement crack detection [7].

Chen et al. established a new teaching model in which ideological and political education was integrated into the curriculum by incorporating ideological and political elements into the teaching process of professional courses. They strengthened the cooperation between professional institutions and universities and integrated ideological and political education into the teaching of human parasitology in the basic medical course. On the basis of improving the construction of the teaching staff, they insist on moral education and education-oriented professional course teaching. They explored the path of combining ideological and political education with medical science education [8].

Li et al. proposed a new neural network for facial expression recognition, which is a novel and efficient deep fusion convolutional neural network. This neural network consists of a feature extraction subnet, a feature fusion subnet, and a learning network layer. All of these are fed jointly to a facial recognition neural network for feature learning and fusion learning. [9].

3. High-Performance Computing and Artificial Intelligence and Ideological and Political Teaching Evaluation

3.1. High-Performance Computing. High-performance computing, or HPC for short, refers to the use of aggregate computing power to process data-intensive computing tasks that cannot be performed on standard workstations, including simulation, modeling, and rendering [10, 11]. When solving various computing problems, we often encounter situations where a general-purpose computer cannot complete the work in a reasonable amount of time due to the large number of operations required, or the available resources are limited due to the large amount of data required. The HPC approach effectively overcomes these limitations by using dedicated or state-of-the-art hardware or by combining the computing power of multiple units. In terms of hardware configuration, there are two commonly used ones: shared memory computer and distributed memory cluster [12].

On a shared memory computer, random access memory (RAM) is accessible to all processing units; in a distributed memory cluster, it is not possible to access memory across different drives or nodes.

High-performance computing often uses different data computing modes, and distributed computing is commonly used. When this article uses a distributed memory configuration, there must be an interconnected network (Figure 1) because different processor units cannot access the same memory space. It is used to send messages between these units or to use other communication mechanisms [13].

In this network structure, each unit has a memory for storing messages to be sent, and the memory is connected to the core of the unit. That is, each core can call the content

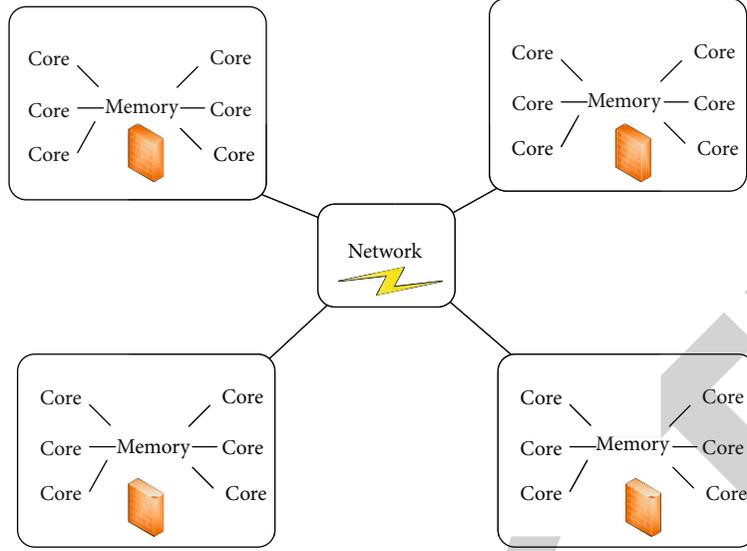


FIGURE 1: Processing unit network structure.

in the memory, and finally data exchange between different memories can be realized through the network.

For decades, HPC has played an important role in academic research and industrial innovation. It helps engineers, data scientists, designers, and other researchers solve many large and complex problems more efficiently. Key benefits of HPC include the following: Reduced need for physical testing: HPC can be used to create simulations without requiring the user to perform physical testing. For example, when testing a car crash, HPC can generate crash simulations more cost-effectively and simply than actual crash testing.

This paper integrates HPC simulations into AI to extend simulated training data or provide controlled labeling for normally unlabeled data. Alternatively, it can build AI into HPC simulations, replacing explicit first-principles models with learned functions [14]. Figure 2 shows the main application areas of HPC.

3.2. Artificial Intelligence Based on High-Performance Computing. The algorithms and computable modeling problems involved in high-performance computing are the focus of research. In the process of high-performance computing development, there are several troubles that need to be solved. Among them, several main problems that we need to solve are as follows: efficient algorithm based on numerical calculation and data fusion algorithm based on mechanism and modeling.

In numerical computation, we start with the following operations based on the efficiency and precision of differential formulas:

$$\begin{aligned}
 P_n(a) &\in \{P_i(a), P_s(a)\} | f(p_m(a)) = \max \{P_i(a), P_s(a)\}, \\
 m_{ij}(n+1) &= m_{ij}(n+1) + a_1 * p_{1i}(n) * (p_{1i}(n) - x_{ij}(n)), \\
 x_{ij}(n) &= m_{ij}(n+1) + m_{ij}(n+1).
 \end{aligned} \tag{1}$$

Among them, i represents the particles, j represents the components, and the learning factors a_1 and p_1 are nonnegative real numbers. In this process, we define an optimal position and characterize it by formula (2). M represents the total number of positions, and p_i represents the overlap between the dimension and the current position.

$$nbest = \frac{1}{M} \sum_n^M p_i(n). \tag{2}$$

During this process of change, the value of M is not fixed and is generally taken according to the following formula:

$$\begin{aligned}
 PP_i &= f_{ij}(n+1) \times P_{ij}(n) + (1-n)f_{ij}(n), \\
 X_{ij} &= PP_i(m) + nbest_i(n+1) \times \ln \left(\frac{1}{m_{ij}(n+1)} \right).
 \end{aligned} \tag{3}$$

That is, it changes from m to n with a linear change. And, with the passage of time, the optimal position is inversely proportional to time, and its calculation formula is shown in formula (4).

$$s(t) = m - mn \times \frac{t}{Maxnbest_j}. \tag{4}$$

We then randomly initialize a position value and define an optimal position and an optimal global position. In order to distinguish them, we use the following formula to express:

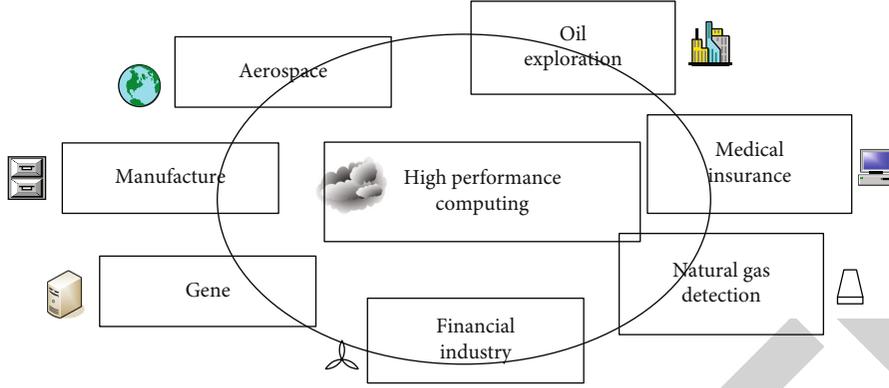


FIGURE 2: Main application areas of HPC.

$$f(x) = \sum_n x_i^2,$$

$$f(n) = \sum_m^{n-1} (100 - x_i^1) (x_j - 1)^2, \quad (5)$$

$$f_n(m) = \sum_{i=1}^n (x_{ij}^2 - 100 \tan(3 \prod n_j)) + 9m.$$

The change of position is based on the maximum and minimum values of the data in the initialization position we define, aiming to convert the position change of the data into a suitable interval. Through the tangent calculation, we convert the position changes at different times to a specific range. During this operation, the information of the unmarked position will be reserved for function learning and calculation, as shown in Figure 3. Through the algorithm, we can basically achieve high-performance computing. However, in the actual process, the calculation is often affected by the amount of data and the scale of the data [15].

In order to use a learned function in place of an explicit model, iterative computations and scaled data comparisons are required. Figure 4 is a flowchart of the operation of the algorithm.

At the beginning of the operation, we will introduce an initial value and perform certain initialization operations on the initial value. Next, we measure and calculate its individual location, then update the unmarked location information appropriately, and finally see if its location meets the accuracy and range requirements. If it is satisfied, end the operation, if not, return to recalculate the individual position.

In the actual amount of data, the transformation process of the information of the unmarked position is shown in formula (6):

$$V = V_j + c_i \times r_j \times (P_n - X_n). \quad (6)$$

Among them, c_i stores the position information for marking, and r_j stores the position information that has not been marked. By marking their position information, we can get a standardized functional relationship V . In the subsequent cal-

culational and storage process, we will continue to adjust the standard functional relationship to prevent data errors.

$$\begin{aligned} X_n &= X_i + V_i(n+1), \\ P(\gamma) &= [(X, y_n) + 1]. \end{aligned} \quad (7)$$

Among them, E_n and y_n represent the absolute numerical relationship and the size of the storage unit, respectively. In the absolute numerical relationship, the logarithm describes the relationship of the value of its function, and the cell size describes the degree of change in its rate of change. The larger the value, the more severe the change in the numerical relationship; the smaller the value, the more gradual the change in the numerical value.

$$\begin{aligned} E_n(|\gamma - y_n|) &= \ln \left(-\frac{|\gamma - y_n|^2}{\theta^2} \right), \\ X(n+1) &= X(n) + \beta \left(-\frac{\partial P(n)}{\partial (P)} \right). \end{aligned} \quad (8)$$

The proportional coefficient k_f represents the ratio of the efficiency in the learning process to the amount of data.

$$k_f = \chi_\mu - f(p_f) = \chi_\mu - \sum_{v=1}^h E_\mu \theta_v(\gamma_f). \quad (9)$$

To further illustrate the effect of the ratio, we compare it with the PSO algorithm, and the following is its calculation process:

$$\begin{aligned} z_n &= \Delta \frac{\partial \lambda}{\partial z_n}, \\ \theta &= \Delta_{\max} - \frac{m(\Gamma_{\max} - \Gamma_{\min})}{m_{\max}}, \\ \Omega &\equiv \frac{1}{2} \sum_{u=1}^m \sqrt{\theta} + \frac{\theta}{2} \sum_{i=1}^{n_h} m_i z(x_i). \end{aligned} \quad (10)$$

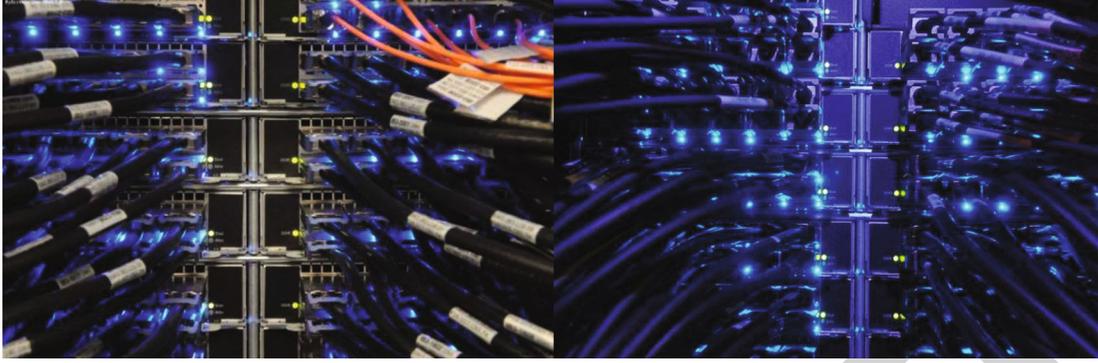


FIGURE 3: High-performance computing.

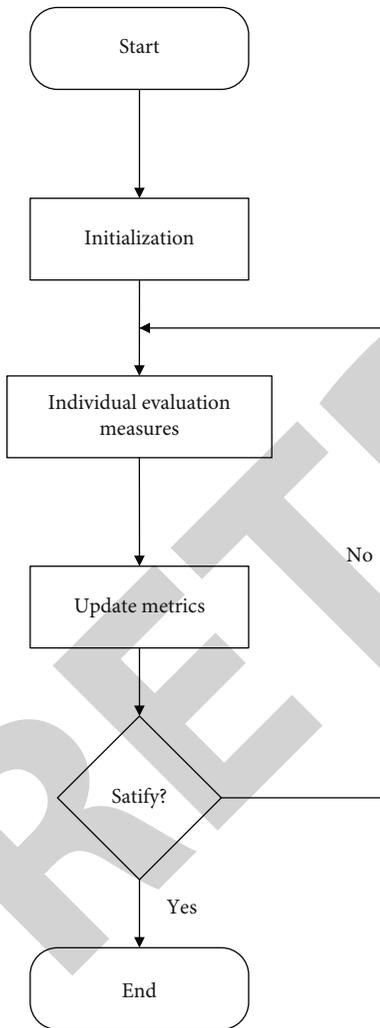


FIGURE 4: Algorithm operation flowchart.

Among them, the algorithm only refers to the maximum and minimum values of z_n and θ to make corresponding adjustments, and the relevant parameters in the adjustment process must also be set to a certain extent, so its global search ability is relatively weak.

$$\theta(m, n) = \sqrt{\sum_{n=1}^m (P_m - p_n)^2}, \quad (11)$$

$$F_n = o[D_s n] * \theta^2.$$

Through the verification of its convergence and robustness, we define the efficiency test function, where P represents its convergence and D represents its robustness. F_n represents the final result, and the difference between its value and the minimum value is the result value, so the larger the final result value, the lower the efficiency, and the smaller the result value, the higher the efficiency.

3.3. Ideological and Political Teaching. In ideological and political courses, teaching evaluation is often based on specific teaching values or goals. It uses actionable scientific resources to systematically collect information and materials, and use them to evaluate teaching activities. In ideological and political teaching courses, learning evaluation includes three aspects: student evaluation, teacher evaluation, and school evaluation [16]. The standard of ideological and political teaching evaluation is mainly reflected in its judgment of the quality of teaching by evaluating the performance of teachers and students in the learning process and the learning situation of students.

3.3.1. Evaluation of Ideological and Political Teaching. However, in the evaluation system measured by performance, the teaching evaluation of ideological and political courses must have the correct value orientation. First of all, we should make it clear that the basic objective of evaluation must always be the overall development of students. Ideological and political courses focus not only on students' learning outcomes but also on students' overall development, develop students' multidimensional potential, help students understand themselves, and build self-confidence. Therefore, in the process of ideological and political evaluation, it is required that the evaluation standards should be adapted to the development needs of students, so as to understand and meet the development needs of students to the greatest extent.

Ideological and political courses play a pivotal role in the field of education. As we all know, thoughts determine actions, and actions explain thoughts. In the teaching process of ideological and political courses, what we advocate is a kind of cultural consciousness and cultural self-confidence. Therefore, the teaching evaluation of ideological and political courses should be based on the culture itself, so that the culture can carry people's values and value orientation. Therefore, in the evaluation process of ideological and political courses, we mainly have two main subjects to evaluate. One is to evaluate teachers and the other is to evaluate students [17].

In the evaluation of teachers, we mainly focus on the potential ability of teachers to learn and teaching level. It mainly evaluates teachers' teaching attitude, teaching content, teaching method, and learning effect. The evaluation of students' learning effect is an important part of evaluating ideological and political courses. If the student's learning objectives have been achieved, then the purpose of this evaluation has been basically achieved.

Therefore, the learning of ideological and political courses should be composed of the three-dimensional goals of knowledge and skills, process and methods, emotional attitudes, and values of ideological and political courses. First, it assesses students' knowledge and skills. Ideological and political courses require students not only to master relevant basic knowledge but also to develop skills. With the advent of the information society, mastering the systematic knowledge of disciplines is no longer the primary purpose of ideological and political teaching. More importantly, students are required to learn the spirit of criticism, thinking, and innovation [18].

Secondly, it evaluates the process and method of ideological and political teaching. Ideological and political courses require students to gain knowledge experience in a learning and communication environment and learn specific teaching methods such as independent learning, collaborative learning, exploratory learning, discovery learning, group learning, and communicative learning.

Finally, it assesses students' feelings, attitudes, and values. Emotions refer to students' enthusiasm and interest in learning. Attitude refers to students' learning attitude, including life attitude, truth-seeking attitude, and tolerance of life attitude. Values emphasize the unity of personal values, social values, and natural values [19–21]. It is something invisible and intangible that must be subtly shaped through the emotional development of students.

3.3.2. Problems Faced by Ideological and Political Teaching Evaluation

(1) *The Subject of Teaching Evaluation Is Single.* In the current ideological and political teaching process, teachers often focus on the progress of students' performance [22]. Therefore, in the actual teaching evaluation process, the main body of our evaluation is often focused on the teaching performance, ignoring the guiding function of ideological and political courses for students' thinking. Even if some schools do not focus on evaluating grades, their selection of evalua-

tion subjects in the evaluation process is often relatively simple, and they are only limited to individual students or teachers themselves.

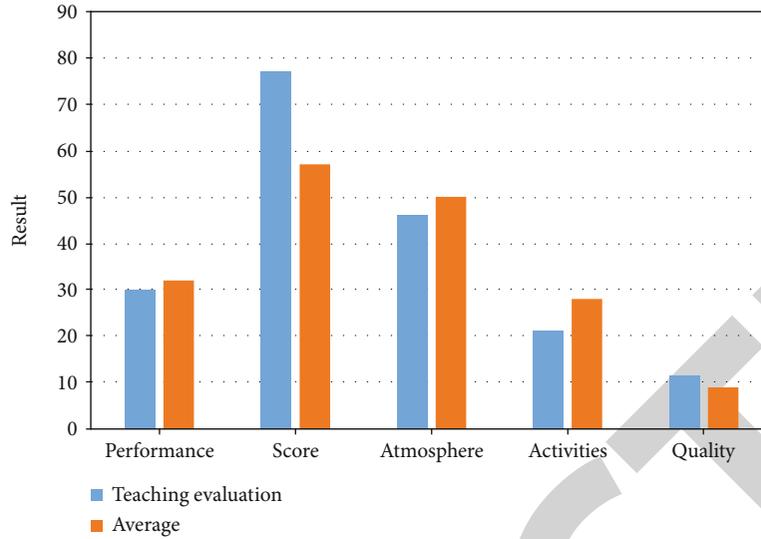
(2) *The Evaluation Method Is Single.* Restricted by the evaluation methods, the evaluation methods adopted by schools are often limited. In some backward schools, people's evaluations of ideological and political courses are often judged by students' dictation, which to a certain extent has led to a single-minded evaluation. Because in this type of evaluation process, teachers often choose children with good grades to participate in the evaluation process. In other areas, the evaluation method adopted by schools is often in the form of table scoring. Although this method quantifies the evaluation, it cannot analyze the evaluation data as a whole, so it loses its original purpose of evaluation.

(3) *The Indicator System Is Not Perfect.* Under the limitation of evaluation methods, the evaluation indicators used by people are often lacking. Typically, schools evaluate courses by focusing first on grades, followed by the discipline of the curriculum. In the face of achievement and discipline, other indicators have given way, and this also loses the meaning of evaluation [23]. Moreover, due to the old educational system or old educational ideas, the new teaching evaluation system is often not well spread and used in the teaching process, which brings challenges to the teaching evaluation innovation.

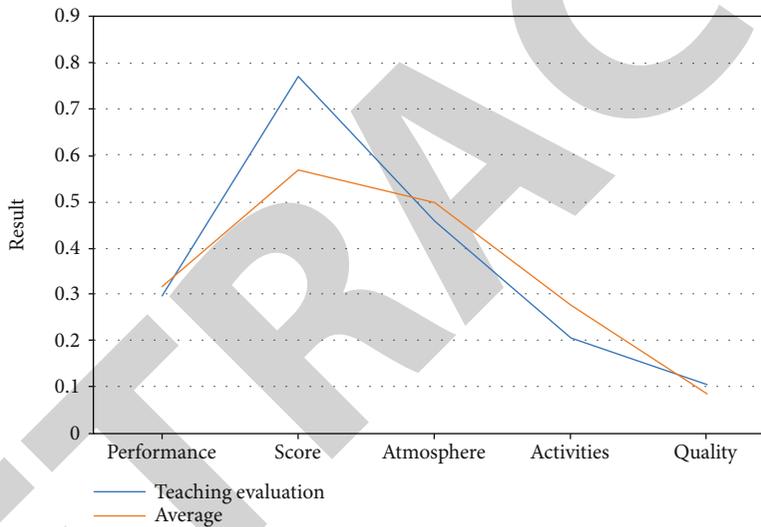
3.3.3. *Evaluation Principles of Ideological and Political Teaching.* After understanding a series of standards and attitudes for ideological and political course evaluation, we also found that in the specific ideological and political course evaluation process, there are the following principles that we need to abide by at all times:

(1) *Comprehensiveness.* In the process of ideological and political teaching, the previous course teaching was often only for grades and teachers' own job selection [24]. Therefore, when evaluating ideological and political teaching, people often only focus on the parts that are beneficial to themselves, so they will lose attention to the student level. But later, people gradually discovered the insufficiency and defect of this kind of teaching evaluation. Therefore, in the current evaluation of ideological and political teaching, we constantly emphasize the comprehensiveness and soundness of evaluation. On the one hand, we must evaluate the overall quality of students, and on the other hand, we must also conduct a strict evaluation of the quality of teaching and the overall quality of teachers [25]. In this process, the evaluation of talent is a complete process from point to surface, from surface to volume. However, we should also pay attention not to pay too much attention to the partial evaluation of students and forget the comprehensive development of students in the process of evaluation.

(2) *Procedural.* In part of the ideological and political teaching process, teachers often only pay attention to the last result and forget to make a judgment on the teaching



(a)



(b)

FIGURE 5: Factors affecting the evaluation of ideological and political teaching.

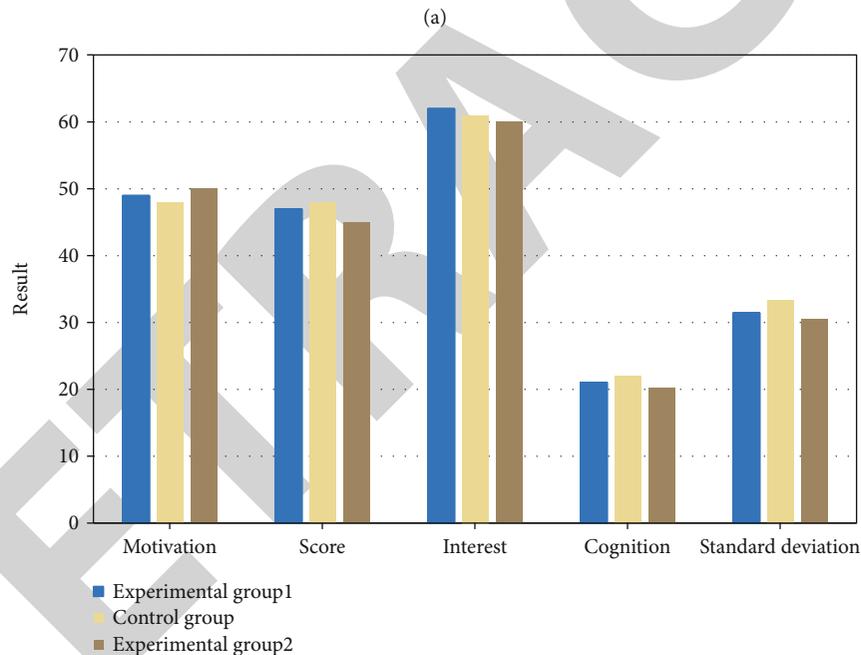
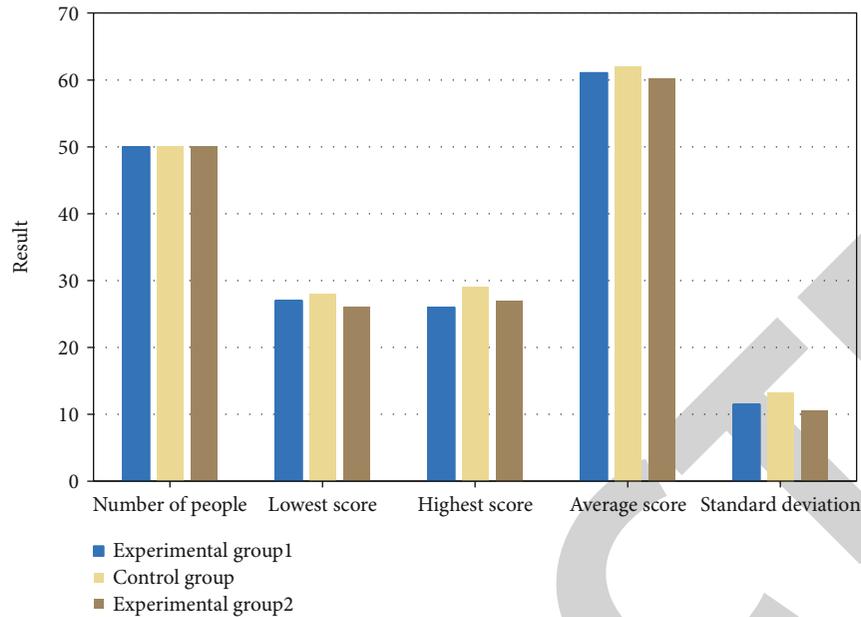
TABLE 1: Scores of students in different groups before the experiment.

Class	The average score	Standard deviation	Mean square error
Experimental class	80.49	16.52	2.24
Experimental class	79.12	16.37	2.20
Control class	81.17	16.14	2.32

process. In fact, the process of teaching evaluation is also very important, because in this process, we can find the problems exposed in the evaluation process. It is often impossible to obtain the specific situation in the evaluation process only through the final evaluation result. Therefore, we should also pay special attention to some special situations that appear in the evaluation process. Especially in the part where teachers and students are confused or there are huge differences, we need to pay more attention. The

integrity of ideological and political teaching determines that our research on its evaluation and its teaching process is a process of continuous development and improvement. What we need to do in this process is to keep each process and make an objective judgment on it.

(3) *Subjectivity*. The most ideal way for ideological and political education to enter the curriculum is “natural generation,” that is, the natural entry from a certain curriculum

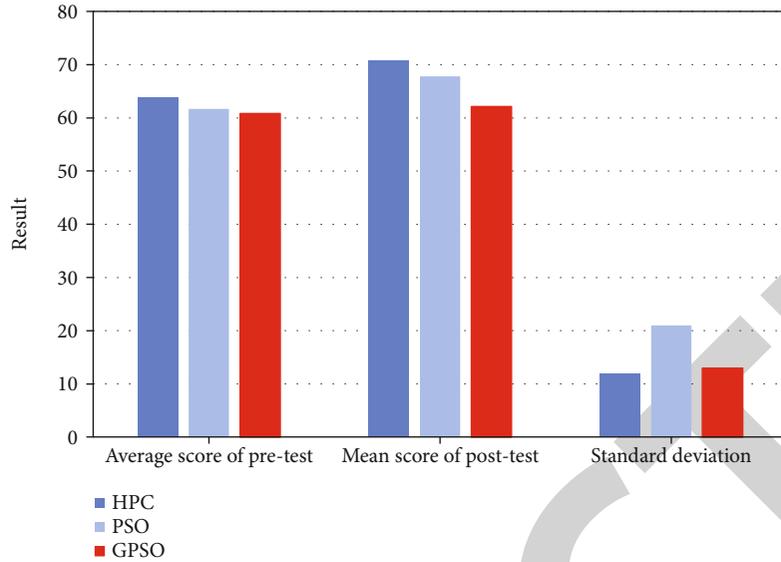


(b)

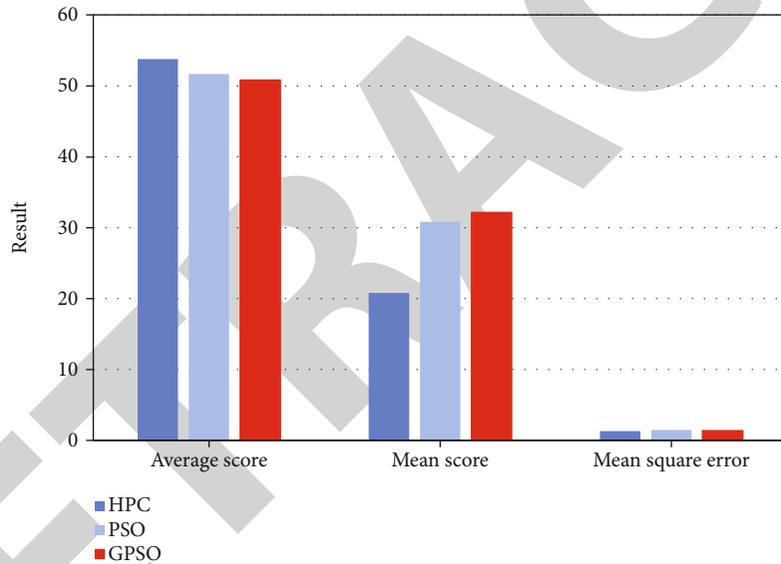
FIGURE 6: The experimental situation of the experimental group and the control group.

knowledge point, so that it will come naturally. The way of cutting is ingenious and natural, in which “ingenious” refers to a smooth transition, so that it will not be too straightforward and become preaching, and the design is “smart,” so that the opening is not too large to be easy to put in and difficult to close. Specifically, the following methods can be used:

- (i) problem creation, that is, a certain class involves ideological and political education problems in the professional field, which can trigger students’ thinking or promote group discussions
- (ii) events or case introduction, that is, the events related to the professional knowledge point of this course. It starts from the specific ideological and political education dimension, expounds the ideological and political education elements behind it, and promotes discussion
- (iii) story introduction which combines the professional knowledge points with stories to guide students to explore
- (iv) situation introduction, that is, based on situational presuppositions, guides students to enter the



(a)



(b)

FIGURE 7: Comparison of various teaching evaluation methods.

situation, and gradually introduces the theme of ideological and political education

- (v) Comparative introduction such as the comparison between China and foreign countries at the level of professional knowledge, which then introduce the theme of ideological and political education such as “sense of responsibility and mission” or “national spirit”

3.4. Basis for the Introduction of High-Performance Artificial Intelligence in Ideological and Political Teaching Evaluation

3.4.1. *Requirements for the New Curriculum Reform.* With the continuous development of science and technology, ideological and political teaching is also constantly advanc-

ing with science and technology [26]. In the context of artificial intelligence, the new type of ideological and political teaching also faces new problems, so it is necessary for us to carry out certain reforms on ideological and political teaching. In the process of continuous integration of science and technology into life, how to deal with traditional values and contemporary value orientation is the primary goal of new ideological and political teaching. Therefore, the new curriculum reform is imminent, and the introduction of ideological and political teaching evaluation into high-performance artificial intelligence is the best strategy to solve such problems, and it is also a good prescription in line with the new curriculum reform [27].

3.4.2. *Requirements for the Function of Moral Education.* The primary goal of ideological and political courses is to

TABLE 2: Scores of students in different groups after the experiment.

Class	The average score	Standard deviation	Mean square error
Experimental class	82.33	10.34	1.28
Experimental class	82.61	9.85	1.38
Control class	81.92	11.28	1.52

TABLE 3: Comparison of student evaluation motivation results.

Options	Before the experiment		After the experiment	
	Experimental class	Control class	Experimental class	Control class
Strong motivation	5	4	7	4
General motivation	2	2	1	2
Less motivated	2	3	1	3

TABLE 4: Comparison of student evaluation interest results.

Options	Before the experiment		After the experiment	
	Experimental class	Control class	Experimental class	Control class
Strong interest	5	4	7	4
General interest	2	2	1	2
Less interest	2	3	1	3

TABLE 5: Comparison of student evaluation cognitive results.

Options	Before the experiment		After the experiment	
	Experimental class	Control class	Experimental class	Control class
Strong cognition	5	4	7	4
General cognition	2	2	1	2
Less cognition	2	3	1	3

establish a good world outlook, outlook on life and values for students. In the context of artificial intelligence, new technological crimes and technological immorality have become a major problem we face. Therefore, the evaluation of ideological and political courses and the evaluation of the effects of ideological and political courses are our direct reference to the personal development of students. On this basis, we must clarify the moral education function of ideological and political courses and give full play to the leading role of ideological and political courses on students.

The teaching development and evaluation of ideological and political courses are developing in continuous progress, so we also need to use new technologies and new standards to measure one new requirement after another. However, the continuous development of ideological and political courses does not affect its original intention and mission, that is, to educate and cultivate people as its goal, and to cultivate good young people in the new era as its own responsibility. Therefore, combining ideological and political teaching evaluation with high-performance artificial intelligence and continuous integration and development are the requirements of ideological and political courses themselves.

3.4.3. Requirements for All-Round Development of Students. The development of students is the cornerstone of national development, and ideological and political teaching for students is an important measure to build the cornerstone of the nation [28]. Therefore, in the process of ideological and political teaching and practice, we must fully carry forward the policy of ideological and political education and cultivating people and constantly promote the all-round development of students, so that students can thrive in a good environment.

Students will always encounter a series of problems in the process of development, and these problems will often play a certain role in promoting the development of students. However, this role is good or bad. A good driving role can play a positive role in promoting the development of students, while a bad driving role will make students fall into a bad vicious circle. Therefore, ideological and political courses help students find good driving forces and help students develop in an all-round way in the process. However, it is time-consuming and laborious to rely solely on manual operations, so artificial intelligence integrating high-performance computing is the best choice for ideological and political courses.

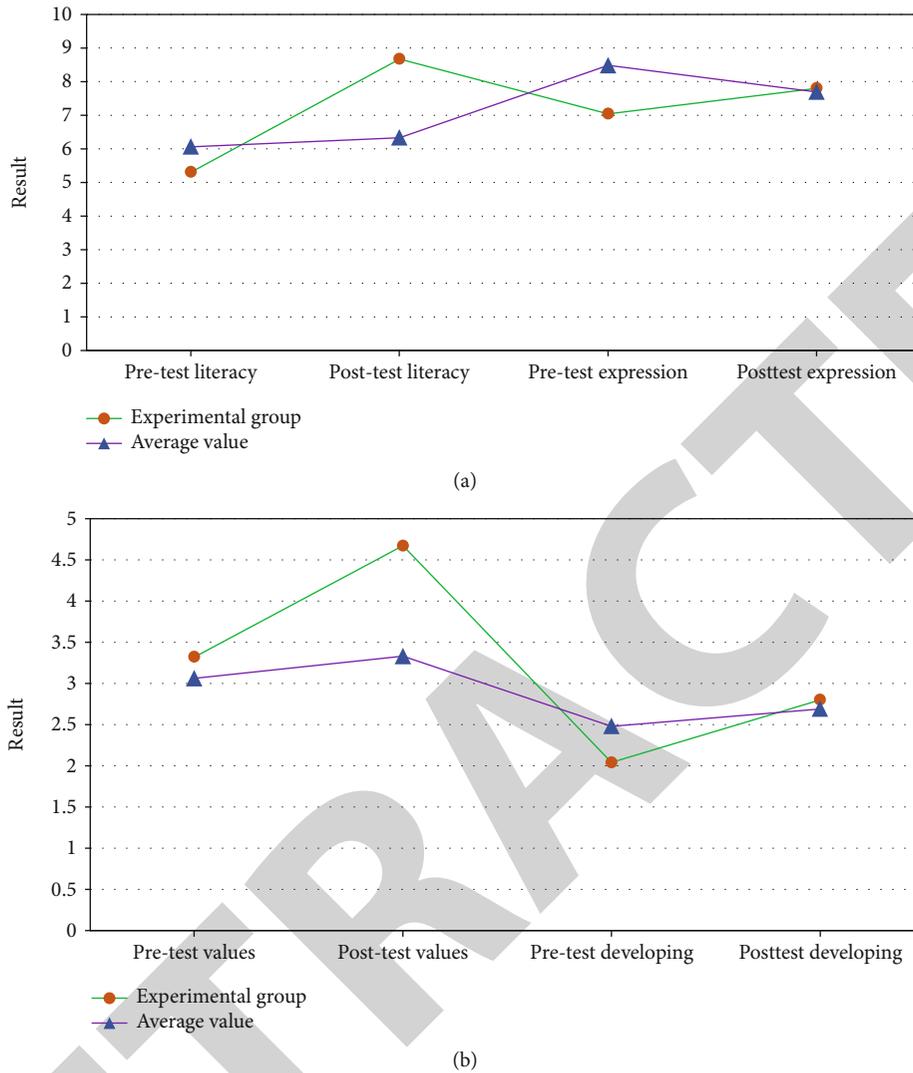


FIGURE 8: Changes in teaching evaluation before and after the experiment.

4. Integration of High-Performance Artificial Intelligence and Ideological and Political Teaching Evaluation

Before exploring the integration of high-performance artificial intelligence in ideological and political teaching evaluation, we made a statistic on the current main factors of ideological and political teaching evaluation. Modern ideological and political teaching evaluation is often affected by classroom performance, student scores, classroom atmosphere, classroom activities, and teaching quality, and the results are shown in Figure 5.

As shown in Figure 5(a), we can clearly find that the evaluation of ideological and political teaching is most affected by the characterization of scores, exceeding the standard value by nearly 20%. This shows that the first indicator of evaluation in the current evaluation system is student achievement. As shown in Figure 5(b), we found that except for student achievement, the proportions of other indicators are almost all below the average. We

can find that the modern teaching evaluation standards are extremely unreasonable, and the only evaluation standard is grades.

After knowing the problems of the current evaluation system, we conducted group evaluations for the classmates. Among them, we divided into two experimental groups and one control group. In this paper, the statistics of their achievements are separately calculated. The results are shown in Table 1.

From the table, we can find that before the experiment, the performance of the experimental group is not particularly ideal, that is, there is a certain gap compared with the control group. It is reflected in the standard deviation that the data of the experimental group is significantly larger, which shows that there are more fluctuations.

On this basis, we further analyzed the specific conditions of the experimental group and the control group. We selected different intervals and factors to conduct a comparative study, aiming to discover the core factors that affect the evaluation. Figure 6 is a comparison result.

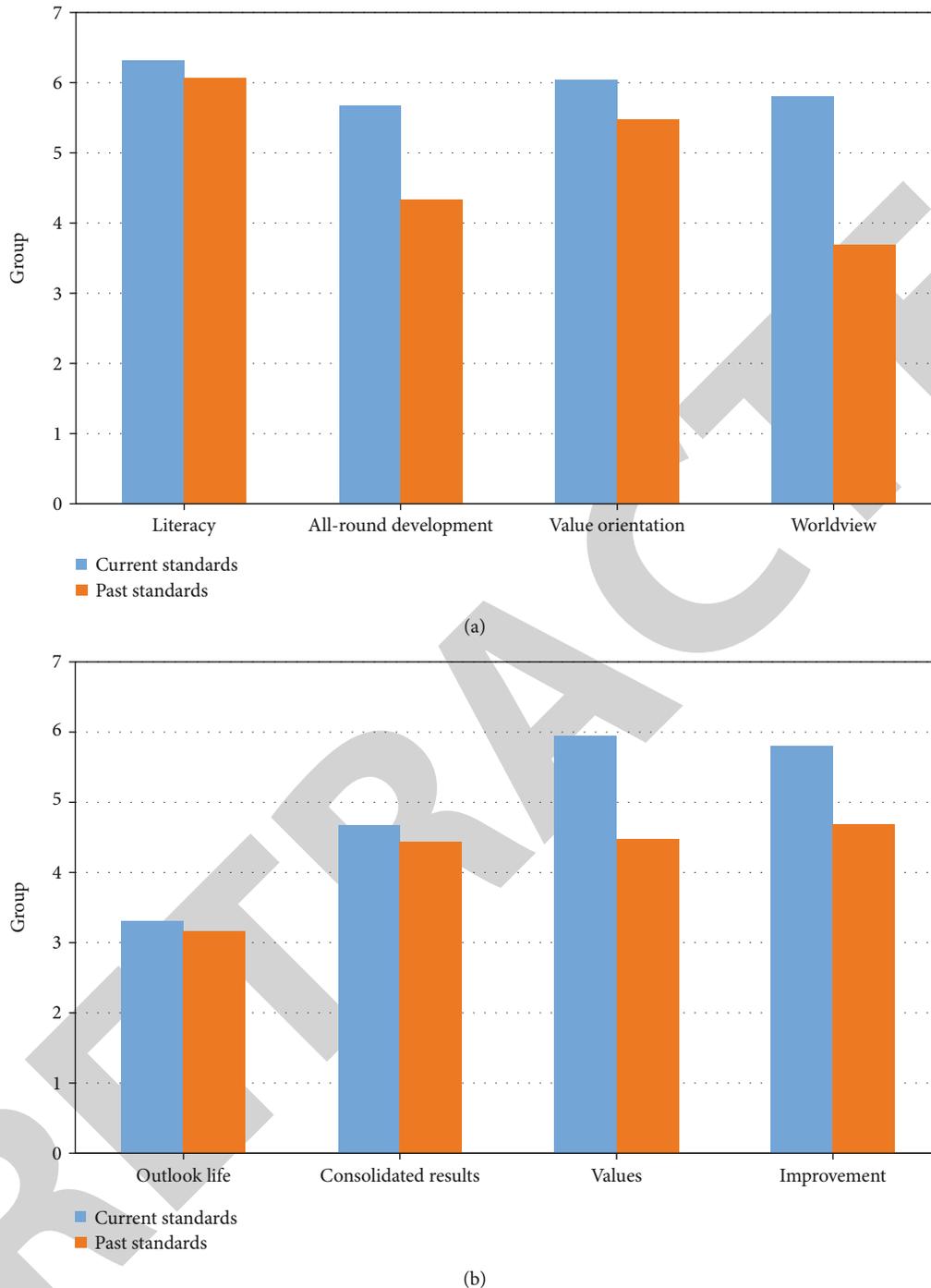


FIGURE 9: HPC-based teaching evaluation factors.

Figure 6(a) shows that after comparing students' grades by region, we found that there is not much difference between the number of students with high scores and the number of students with low scores in ideological and political courses. This will affect the objectivity of the evaluation to a certain extent. Figure 6(b) shows that students' interest is an important factor affecting their evaluation of things, with a ratio of up to 60%.

On this basis, we conduct experiments to support and integrate the evaluation of ideological and political teaching through artificial intelligence based on high-performance computing. At the same time, we also conduct a comparison and analysis of other ideological and political evaluation methods, and the results are shown in Figure 7.

Figure 7(a) shows that students' grades and standard deviations are relatively low in the HPC-based evaluation

model, and we can clearly see that other methods also have certain advantages in standard deviations. Figure 7(b) shows that under HPC, the average score of ideological and political evaluation has a certain data advantage, and its standard deviation is 5% lower than other methods.

After having an HPC-based evaluation system, we believe that under this evaluation system, students will learn more from the ideological and political classroom, so we reevaluate the experimental group and the control group. The results are shown in Table 2.

Table 2 shows that after the experiment, the performance of the experimental group has been significantly improved, which fully shows that the HPC model based on benign ideological and political evaluation will also affect the students' performance. At the same time, we also evaluate students' motivation, interest, and evaluation cognition. The data performance of the control group and the control group is shown in Tables 3–5.

Table 3 shows that before and after the experiment, people's motivation for evaluation has changed to a certain extent. Especially in terms of strong motivation, the number of people has increased significantly, which shows that the HPC-based evaluation mechanism has achieved remarkable results. Table 4 shows that people's interest in evaluation has been improved to a certain extent after the experiment, and there has been a certain increase in the number of interested people. Table 5 shows that the overall performance of the experimental group and the control group was similar in terms of objective cognition and psychological cognition of the evaluation, but the number of people with strong psychological cognition still increased to a certain extent after the experiment.

Then, in the HPC-based ideological and political course evaluation system, Figures 8 and 9 give an answer about how we evaluate courses and teaching classrooms, as well as our key focus objects and teaching goals in the process of teaching evaluation.

Figure 8(a) shows that in terms of ideological and political literacy and ideological and political literature expression, the overall quality of students after the experiment has improved to a certain extent. This shows that the evaluation of teachers has played a certain role in the experiment process, and teaching pays more attention to the cultivation of students' literacy and overall development in the teaching process. Figure 8(b) shows that teachers' teaching evaluation plays a pivotal role in the overall development of students and has played a great role in the practice and formation of students' values.

After clarifying the subject and main object of ideological and political course evaluation, we made an overall summary of the evaluation factors based on this, and the results are shown in Figure 9.

Figure 9(a) shows that under traditional standards, although ideological and political teaching pays certain attention to students' literacy and value orientation, it is not enough. Under the new model based on HPC, the new evaluation system pays attention to the content of students' overall development and worldview, which was seldom paid attention to before. Among them, the attention to students'

comprehensive development can reach 56.7%, which is much higher than the traditional 36.9%. Figure 9(b) shows that under the new standard, the evaluation focuses more on the evaluation of students' development and overall quality and pays less attention to previous grades and students' personal qualities. Under the traditional model, only 44.3% were concerned about the cultivation of students' personal qualities, while the new evaluation system paid 63.7% of the attention to students' personal development.

5. Discussion

With the development of the times, artificial intelligence has increasingly become the trend-setter of the times. In the context of artificial intelligence, traditional ideas and the school's consistent teaching philosophy have certain limitations, which affect the overall development of students to a certain extent. Artificial intelligence under high-performance computing shows its development vitality in the continuous development and continues to develop itself with the deepening of things. As an important course leading value and cohesion orientation, ideological and political courses are our first position in the face of new things. Therefore, improving the evaluation system and evaluation mechanism for ideological and political teaching is the requirement of the times and the requirement to promote the all-round development of students. Improving the evaluation of ideological and political teaching can not only play a huge role in the innovation and progress of ideological and political courses but also contribute to the smooth realization of the educational goals of the new curriculum standards and the cultivation of a modern high-quality teacher team. It is conducive to cultivating students' autonomous learning ability, collaborative inquiry ability, hands-on practice ability, and innovative spirit. It can also play a role in promoting the reform of teaching courses in the entire education industry.

6. Conclusion

The ideological and political courses should be guided by the concept of "everything is for the development of students" in the new curriculum standards and change the outdated evaluation thinking in the past. It not only pays attention to students' general cognition and understanding of the world but also pays more attention to students' all-round development, personal growth, and realization of personal value. Starting from the theory of developmental teaching evaluation and pluralistic teaching evaluation, this paper explores the indicators of ideological and political teaching evaluation. This paper analyzes from the perspective of HPC theory and mainly discusses how to use HPC theory combined with artificial intelligence to optimize and upgrade teaching evaluation in the teaching evaluation of ideological and political courses. Based on the current problems in the evaluation of ideological and political teaching, this research provides a detailed description of high-performance computing, artificial intelligence, and ideological and political teaching evaluation.

Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Conflicts of Interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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