

Retraction

Retracted: Analyzing the Network Evaluation Model in Mobile Learning Environment to Monitor Different Capabilities of Students

Wireless Communications and Mobile Computing

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1].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

 Y. Hu, "Analyzing the Network Evaluation Model in Mobile Learning Environment to Monitor Different Capabilities of Students," Wireless Communications and Mobile Computing, vol. 2022, Article ID 4650399, 12 pages, 2022.

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Research Article

Analyzing the Network Evaluation Model in Mobile Learning Environment to Monitor Different Capabilities of Students

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In light of the current ideological and political teaching quality's poor impact, this paper proposes the construction and research method of a network ideological and political teaching quality evaluation model from the perspective of school-enterprise cooperation, optimises the network ideological and political teaching model using the Internet technology, constructs the teaching quality evaluation index and algorithm, and realizes the optimization of the ideopolitical teaching model. Finally, it is confirmed by experiments. According to the viewpoint of school endeavor collaboration, the organization's philosophical and political quality evaluation model has higher practicability during the time spent in commonsense application and completely meets the examination prerequisites.

1. Introduction

As a result of the advancement of modern information technology, the integration of network technology and modern educational technology has become a significant breakthrough in current education and teaching reform [1]. The network ideological and political teaching model has prompted heated debate and inquiry among educators, and it has also become a teaching model that many teachers are studying and striving to adopt. The benefits of traditional face-to-face classroom teaching are combined with the benefits of network teaching in network ideological and political education, which promotes teachers' leading and directing responsibilities in the classroom and effectively supervises students' learning processes. At the same time, it can reflect students' dominating position in learning, inspire students to study autonomously, and foster students' inventive consciousness. Students can select their own speed and devote 100% of their attention to their individualised learning based on their learning traits and abilities [2]. Many domestic researchers have examined the network ideological and political teaching model as the network ideological and political teaching model has become an important direction of education reform. This study creates a network ideological and political teaching mode training system based on the different stages of the development of network ideological and political teaching and uses colleges and universities as an example to explain the relevant practice.

The growing popularity of technological tools among students, particularly portable ones like mobile phones and tablet computers, has made it possible to implement some of these resources into the field of second language instruction. The usage of mobile devices is progressively rising in today's society, and individuals of all ages have begun to embrace these gadgets in increasing numbers. Because mobile technologies are present in every facet of life, many spheres, including the entertainment industry, the economic world, and educational institutions, have seen significant shifts and transformations as a result. In this light, the idea that mobile learning may be included in educational activities, in general, is currently gaining traction. Mobile learning alleviates the mental strain placed on pupils by lowering the quantity of content that must be taught to them in a particular period. Mobile learning is advantageous for its practicality, adaptability, and versatility in the context of contextual education [3, 4].

The contribution of the research is as follows: examine the relationship between students' learning adaptability and eight characteristics, including learning attitude, independent learning, teacher teaching, curriculum, teaching management, learning support, learning platform, and learning environment [5]. Based on the above references and their own practical experience of curriculum teaching on the smart tree network platform, this paper proposes some principles of network ideological and political teaching quality evaluation and further discusses and analyzes the network ideological and political teaching quality evaluation model.

2. Evaluation Model of Network Ideological and Political Teaching Quality

2.1. Network Ideological and Political Teaching Information Management Platform. Education quality is a systematic project of the talent training project. Teaching quality is the core element of the whole system engineering of school education and plays a key role in the whole system. If we regard the systematic engineering of talent training as information, we can also regard the teaching quality as an information complex with specific content, that is, the information complex of the country and society's demand for talents and the degree to which colleges and universities meet the social demand, including the information complex of talents' professional knowledge, professional skill level, ideological and moral physical quality, and psychological quality [6]. Cloud computing has achieved many advantages over traditional hosts by providing effective computing resources and computing large-scale information resources. However, cloud computing solutions do not necessarily have great advantages in providing security and performance and controlling enterprise applications. The virtualization server is used to run special hardware on the public cloud platform, which has adapted to the needs of global enterprise through information and communication technology solutions [7]. The development of cloud computing has gradually improved many businesses, made up for many deficiencies, and followed the perfect and unified law among various applications, as shown in Figure 1.

From bottom to top, the platform is made up of four layers: physical resource layer, resource pool layer, management middleware layer, and SOA construction layer, which includes service interface, registration, search, access, and workflow, as shown in the diagram [8]. In this regard, people began to describe the working principle of cloud computing: first, in a requirement of the cloud computing directory module, the user calls it through the interface between the user and the cloud; second, the cloud system management starts to confirm and process the request and distribute the available resources to the user. The most important thing is that the cloud provides users with a suitable operating environment through corresponding configuration tools [9]. The evaluation of learning quality from the perspective of school-enterprise cooperation takes the campus network as the platform and students and teaching managers as the center. In the development of this model, students, teachers, and administrators must register before they have the right to log in, and then, conduct a series of operations such as evaluation or statistics. Each role plays a different role, because completing their own tasks is helpful to the design and management of the whole platform. The user function requirements are shown in Table 1.

Network ideological and political teaching technology provides users with access to private information in the cloud. User needs can also be extracted through network teaching, which is the whole function of user interaction function [10]. The user's service list is clearly displayed in the service directory module. The system management part uses, allocates, and effectively manages all information resources in the whole computer. Its main purpose is to give full play to the core value of the system management module. The configuration tool is required by almost all software, and its function is to initialize the running environment of each key point. The function of the monitoring and statistics function block is clear at a glance [11]. It detects whether each module operates normally and counts the utilization frequency of each function node. Based on the development of cloud computing, it is an emerging technology. Users' cloud request services are carried out through the query service directory provided in the mobile cloud environment. Users can download and install software in the cloud and use query statements to obtain their required information resources [12]. The structural framework of school-enterprise cooperation is shown in Figure 2.

The diagram shows essential components. The most basic server group is the base layer, which is responsible for the whole solicitation; the design tool is responsible for the system and smooth operation of the framework climate; configure that the executives are responsible for the administration and operation of the whole framework, and the service directory is the root directory of user queries [13].

2.2. Evaluation Algorithm of Network Ideological and Political Teaching. In fact, there are still many difficulties to deal with in the mobile learning platform. E-learning is based on network resources, but now, many network resources are flooded and cannot get effective information, which leads to a serious waste of information resources, and students can only stay on the surface of learning. It is impossible for teachers and students to meet the needs of all learners [14]. Normally, it is also difficult to achieve. Even if the existing learning resources cannot be updated in time, there is a lack of typical learning cases, and the nonuniform learning level has a great impact on students' learning. The whole learning mode lacks a learning evaluation model, so it is unable to give timely feedback on the situation of students, and the knowledge system structure is chaotic. Teachers can say where they say and where they think of it. The consequences of fragmented learning for students are unclear thinking and disordered thinking [15]. The introduction of e-learning has substantially improved the current learning environment and created a learning environment that is not affected by time. Students' learning potential and desire in learning are enhanced by location constraints. Furthermore, students can fully utilize cloud learning tools, acquire timely information, and communicate and interact in a variety of roles on the cloud. Further improving the learning quality evaluation model is the core step of e-learning [16]. The learning quality evaluation is

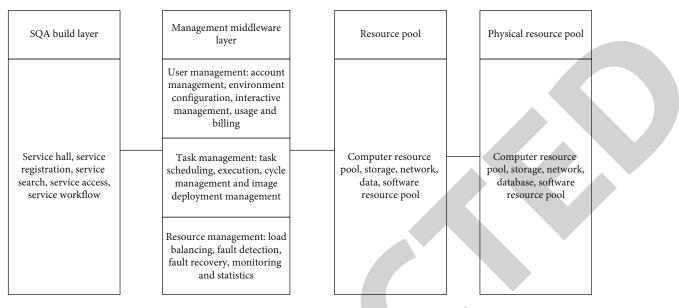


FIGURE 1: Quality management structure of ideological and political teaching.

TABLE 1: Functional requirements.

Functional module	Student	Teacher	Controller
Client authentication	Need	Need	Need
Personal information	Need	Need	Need
Evaluation selection	Need	Unwanted	Unwanted
Evaluation modification	Need	Unwanted	Need
Learning feedback	Need	Need	Unwanted
Notice	Unwanted	Need	Need
System authority management	Unwanted	Unwanted	Need

designed and developed according to the learning effect. It has certain evaluation contents and modules. The learning quality evaluation can not only reflect the teaching quality of teachers and scholars but also provide feedback messages for students to feed back on the learning stage. The development of the learning quality evaluation model is to meet the needs of learning from the perspective of school-enterprise cooperation, in the overall page style of the evaluation [17]. The internal structure module and the guidance strategy are both designed in a consistent manner. Figure 3 depicts the procedure. In the feedback stage, the BP neural network method is also used.

Teaching management consists of two aspects: stringent classroom teaching arrangement and strict management—follow the college's rules and regulations and arrive on time for courses. The teaching content includes three aspects: the teaching knowledge is systematic and accurate, the focus is prominent, and the reasoning is sufficient; arrange and correct homework with care, and hold Q&A sessions on a regular basis: close contact with reality, skilled and substantial content, large amount of information, and appropriate examples [18]. Teaching preparation includes three aspects:

thorough study of teaching materials, systematic reading of professional works related to the subject, and teaching methods reference materials; understanding of teaching objectives and syllabus and sufficient lesson preparation; clear and concise design of electronic courseware with pictures and texts. The basic teaching skills include three aspects: correct teaching posture, clear teaching logic and clear organization, and reasonable teaching time allocation-Mandarin teaching, accurate and vivid language, and neat blackboard writing. Teaching methods include three aspects: flexible teaching methods, easy-to-understand lectures, and methods that can guide and inspire students' positive thinking. Adopt open teaching to cultivate students' innovative ability: make rational use of modern auxiliary teaching means [19]. Teaching and educating people include two aspects: a strong sense of teaching responsibility and setting an example and being a teacher. Assist pupils in changing their learning attitudes and adopting effective learning strategies. Table 2 shows the results of peer teacher evaluations.

The school teaching process used to be teacher centered, so we must change our ideas. Teachers play a guiding and auxiliary role, and students are the main body of the teaching process. The students know the most about the situation of teachers' curriculum teaching and have the most say. Students' learning effect and students' mastery of knowledge are the most direct reflections of teachers' curriculum teaching quality [20]. Student evaluation is conducted once a semester to ensure that all teachers have the opportunity to be evaluated. The evaluation is based on the class, and the academic affairs office organizes the class students to evaluate each teacher and guides the students to fill in the form seriously, fairly, and accurately. The student evaluation form is presented in Table 3.

The objective of showing quality evaluation is to empower showing change, increase showing quality, alleviate understudy pressure, foster understudies' insight, and develop understudies' capacity to examine and tackle issues.

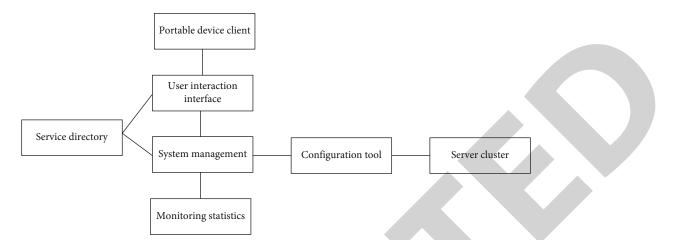


FIGURE 2: Operation principle of teaching information management from the perspective of school-enterprise cooperation.

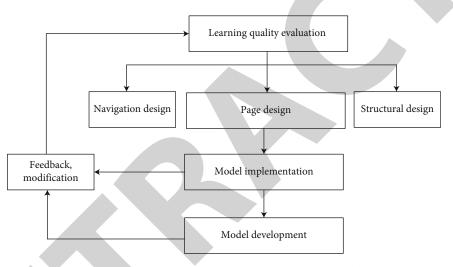


FIGURE 3: Design and development process of ideological and political learning quality.

 TABLE 2: Peer teacher evaluation form.

	Primary index	Secondary index
	Teaching management	Classroom teaching is well organized and managed; abide by the rules and regulations of the college and attend and finish classes on time
	Content of courses	Teaching knowledge system, accurate, focused and fully explained; carefully arrange and correct homework, and regularly organize Q&A close contact with practice, skilled and substantial content, large amount of information, and appropriate examples
Peer teacher evaluation	Teaching preparation	Thorough study of materials; understand the teaching objectives and syllabus and make full lesson preparation; the design of electronic courseware is clear, concise, and illustrated
	Basic teaching skills	The teaching status of teaching resources is correct; the teaching logic is clear, the organization is clear, and the distribution of teaching practice is reasonable
	Teaching methods	Flexible teaching methods; adopt open teaching; rational use of modern auxiliary teaching means
	Teaching and educating people	Strong sense of teaching responsibility and setting an example; guide students to correct their learning attitude

While evaluating showing quality, we ought to take a goal, fair and sane methodology, as opposed to depending on hypothesis or individual sentiments, and take a stab at philosophical, logical, and commonsense unity [21]. In schools

and colleges, showing quality is in many cases surveyed through four channels: understudy evaluation, master evaluation, peer evaluation, and educator self-evaluation, with the last evaluation results orchestrated. However, a few issues

	Primary index	Secondary index
	Teaching methods	Teachers' teaching methods and means are diversified; extracurricular bibliography is provided and effective; the lecture progress is moderate, and the time is reasonably arranged; organize teaching seriously; encourage students to ask questions for discussion
a Student evaluation of teaching c	Teaching attitude	Teachers do not listen to classes at will; fairness to learning evaluation methods; the teaching plan of this course is clear; serious teaching and strict requirements
	Content of courses	The teacher's lecture is focused, detailed, and appropriate; rich content and correct views; introduce the latest achievements in combination with discipline development; integrating theory with practice and disseminating learning and research methods
	Teaching effectiveness	Through teachers' teaching, they improve their interest in the subject, learn some valuable things, and introduce the latest achievements in combination with the development of the subject; improve the ability to recognize and solve problems and understand and learn the contents of the course

still exist in the creation, application, and analysis of the evaluation outcomes of the demonstrating quality evaluation framework, for instance, the investigation of evaluation information, the implied use of evaluation, the utilization of evaluation procedures, and the updating of evaluation procedures. These issues have a direct impact on the function of evaluating instructional quality and uncovering prospective knowledge. Set *a* students in the class at the beginning of the semester. The number of excellent, good, medium, pass, and fail in the examination results is *n*, of which the values are 1, 2, 3, 4, and 5, respectively. The state vector at the beginning of the semester is

$$R = \left(\frac{a_1}{N}, \frac{a_2}{N}, \frac{a_3}{N}, \frac{a_4}{N}, \frac{a_5}{N}\right).$$
(1)

After the end of the period examination, among the n students with excellent results, n students still remained excellent, and others were reduced to good, medium, and failed, respectively. Therefore, the transfer of students with excellent results at the beginning of the semester is

$$S = \left(\frac{a_1 - n_{11}}{RN}, \frac{a_2 - n_{12}}{RN}, \frac{a_3 - n_{13}}{RN}, \frac{a_4 - n_{14}}{RN}, \frac{a_5 - n_{15}}{RN}\right).$$
(2)

According to the principle of weight determination, with reference to the weight setting data of other higher vocational colleges, the weights of primary indicators and secondary indicators are determined through expert discussion by using an expert opinion method and investigation and analysis method, and the sum of the weights of indicators at the same level is 1. The value of teaching quality evaluation is simulated using a BP neural network in this paper [22–25]. The primary index evaluation value is used as the input value, and the secondary index evaluation value. The corresponding weight is shown in Table 4.

The scientific degree of model establishment is directly proportional to the quality of sample data. The emphasis of evaluation has shifted due to the great subjectivity of curriculum teaching quality evaluation and the influence of psychological elements. C_i is distinct. To make the original data

more scientific and reliable and to ensure network training and model quality,

$$Y = S \sum_{i=1}^{20} C_i R - N.$$
 (3)

By calculating the *k*-th sample error,

$$E_k = \frac{1}{2Y} \sum_{t=1}^r (SR - N)^2.$$
 (4)

For information resource utilization organizers, the utilization frequency and evaluation feedback of school users on information resources are directly proportional to the funds for information environment construction obtained by the school, which urges the school to actively organize its users to widely use high-quality information resources f(C, E, P). Encourage teachers and students to use information resources in order to improve the quality of instruction. Time for the transfer to be settled u_r with fee payable for a single resource is expressed as

$$M = f(C, E, P) - \frac{\sum_{r=1}^{S} u_r y_{ij}}{E_k \sum_{i=1}^{m} v_i x_{ij}} - 1.$$
 (5)

Allocation rate of single information resources y_{ij} depends on the accumulated points after the resource is used by the user v_i in a certain period of time, point exchange rate x_{ij} , and corresponding incentive control parameters C_i , where *E* can be expressed as

$$\delta = f(C, E, P) - \max \frac{\sum_{i=1}^{s} u_i y_{i0}}{\sum_{i=1}^{m} v_i x_{i0}} + \frac{pF}{\sum_{t=1}^{r} (SR - N)^2} - M.$$
(6)

F is the conversion rate of points. Total investment of information resources is allocated by *p* and all resources in the library C_i . The use of points is determined by the sum of points, where *C* is the cumulative integral value of a resource in the settlement cycle and X_0 is a nonnegative integer value with an upper limit Y_0 . The upper limit is the

 TABLE 4: Weight correspondence.

Types of teaching evaluation	Primary index	Primary index weight	Network input label
	A11	0.05	Z1
	A12	0.05	Z2
	A13	0.05	Z3
	A14	0.05	Z4
Supervising expert evaluation of teaching	A15	0.05	Z5
Supervising expert evaluation of teaching	A16	0.05	Z6
	A17	0.05	Z7
	A18	0.05	Z8
	A19	0.05	Z9
	A20	0.05	Z10
	B11	0.03	Z11
	B12	0.05	Z12
Peer teacher evaluation	B13	0.03	Z13
reel teacher evaluation	B14	0.05	Z14
	B15	0.05	Z15
	B16	0.03	Z16
	C11	0.25	Z17
Student evaluation of teaching	C12	0.2	Z18
Student evaluation of teaching	C13	0.25	Z19
	C14	0.25	Z20

product of the number of users using this resource and the maximum integral set by the resource design standard, expressed as u^T ; by substituting the formula, we can get the calculation of single-resource allocation efficiency in t:

$$M_{i} = \frac{MF}{T\sum_{i=1}^{N}C_{i}} - C_{i}P_{i} - \frac{u^{T}Y_{0}}{\delta v^{T}X_{0}} - \sum_{r=1}^{S}u_{r}y_{ij}.$$
 (7)

In the formula, the incentive control parameters are determined according to the average value of the cumulative integral of a resource and the cumulative integral of resources in the library. The objective function is formulated with practice as the fundamental theme, and the rest are nonmain objectives, and then, the selected threshold is calculated: $\min_{1 \le i \le m} u(f(x)) = \min_{x \in X} \min_{1 \le i \le m} \{f_i(x)\}$. At this time, the secondary goal is used as a constraint condition or constraint function to find the primary goal.

$$d_{p}(f(x), \bar{f}; \omega) = \left[\sum_{i=1}^{m} \min_{1 \le i \le m} u(f(x)) C_{i} P_{i} \frac{u^{T} Y_{0}}{\delta v^{T} X_{0i}}\right]^{1/p},$$

$$F(x) = \frac{\min_{1 \le i \le m} \{f_{i}(x)\} - F}{\sum_{i=1}^{r} (SR - N)^{2}} - \sum_{i=1}^{p} \left[d_{p}(f(x), \bar{f}; \omega) - 1\right]^{2}.$$
(8)

Using the basic principle of optimization, the fuzzy is abstracted into a specific evaluation function, and the specific formula is obtained; then, the requirements can be calculated and solved. The existence of teaching analysis is to provide learners with learning direction and pave the way for the next design. The teaching analysis of mobile learning determines the types of learners and then confirms the objectives to be achieved at each stage. The learning objectives cover a wide range, including learning methods, personal emotions, and knowledge level. The classification of some learning objectives is presented in Table 5.

From this table, we can see the specific types of target learning and the objectives to be achieved. The objectives to be achieved need to be confirmed again. Then, from the perspective of school-enterprise cooperation, the content should be specified according to the purpose analysis method.

2.3. Realization of Ideological and Political Teaching Quality Evaluation. The design of functional structure is convenient to develop the system, and the evaluation system is becoming more and more popular, with the increasing maturity of Internet technology. From the perspective of schoolenterprise cooperation, the evaluation method is also very simple. Learning will continue to exist. Therefore, creating a perfect, timely, and efficient evaluation system is crucial. The learning, mobile cloud storage, and evaluation management features of the assessment system described in this study are all three, as shown in Figure 4.

The learning quality evaluation model from the perspective of school-enterprise cooperation is not only a new learning model but also a new evaluation model. This paper focuses on quality evaluation, combines learners with teachers, and describes in detail learners' evaluation objectives and evaluation strategies. This learning quality evaluation model is divided into two parts: the design of learning and teaching content from the perspective of schoolenterprise cooperation—mobile learning evaluation design,

Classification	Target	Explain			
	Understand	The concept can be repeated			
	Master	Be able to express its central idea			
Understanding	Application	Its principle is applied to practical problems			
	Evaluate	Judge relevant knowledge			
	Follow	Focus on it			
	Reaction status	Actively participate in it			
Personal emotion	Value judgment	Compare and analyze their emotions and form their own theory			
	Organization skills	Control this situation for my own use			
	Perception	Use your senses to get some information about new technologies			
Technical capability	Imitate	Imitation using perception			
reennear capability	Adapt	Make corrections in the new environment			
	Innovation	Make creative updates			
system	g quality evaluation under mobile cloud computing	Learning module Resource publishing Cloud disk Cloud storage module Cloud notes Calendar schedule Evaluation management module Learning evaluation			

TABLE 5: Classification of some learning objectives.

FIGURE 4: Functional structure of ideological and political teaching quality evaluation.

teaching methods, and evaluation strategies, and the preparation of learning resources from the perspective of schoolenterprise cooperation—mobile learning design and mobile cloud environment department. The design of the quality evaluation model based on the perspective of schoolenterprise cooperation is shown in Figure 5.

As can be seen from the figure, this is a circular process. What we do is to pave the way for the evaluation of learning quality from the perspective of school-enterprise cooperation. First, we should further analyze the learning environment and evaluation strategy and design through demand analysis and improve the demand analysis again through the investigation of constraints, so as to develop a more suitable learning evaluation platform. A BP neural network technique is utilized to analyze the restrictions and feed them back to the demand analysis step. Because the BP neural network method is based on the backpropagation concept, it adjusts the fork value and threshold in real time based on the input and output to get the optimal result, that is, the least sum of squares of errors. As a result, this method improves the accuracy of demand analysis. The following sections make up the learning quality evaluation method based on the perspective of school-business collaboration: mobile evaluation end, network communication end, threetier platform, and mobile cloud platform, as shown in Figure 6.

Teachers or learners transmit knowledge or content to be evaluated to the presentation layer through mobile terminal equipment under the communication network channel. Then, the data is processed according to the function of each layer. The mobile learning quality evaluation end, based on the perspective of school-enterprise cooperation, installs the terminal app on the smartphone. Learners can evaluate at any time and can display the wireless communication network based on Wi-Fi or 3 and 4G network or the network provided by the giants of major telecom and mobile Internet companies. The three-tier architecture (DL, Bll, and U) provides an interface access service to transfer some services to

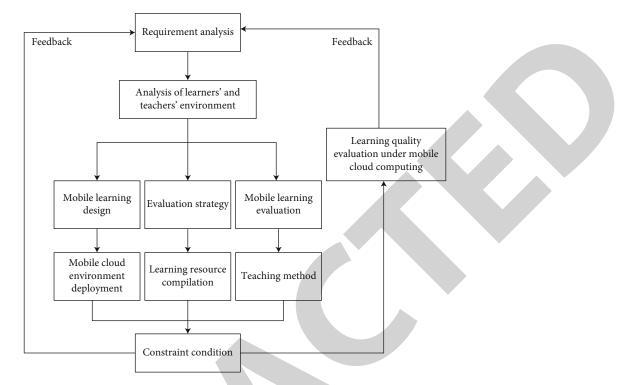


FIGURE 5: Management process of ideological and political teaching quality evaluation under school-enterprise cooperation mode.

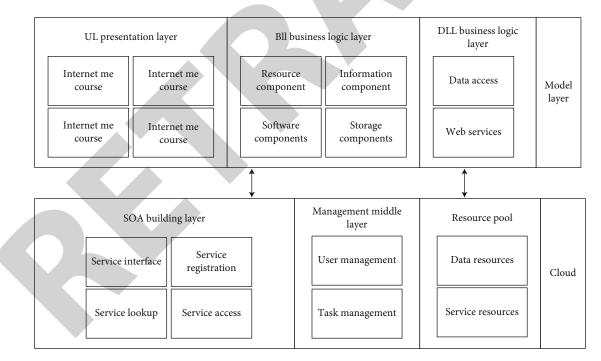


FIGURE 6: Evaluation structure of learning quality of ideological and political teaching.

the mobile cloud platform through the network layer for computing, storage, and processing. Students must develop their awareness of autonomous learning and group cooperative learning abilities in this instructional approach. As a result, relevant teaching activities are organized in three stages: before class, during class, and after class, and are carried out online and offline in that order. The specific implementation process of these three stages is presented in Figure 7.

As can be seen from the diagram, teachers must refine course content while also communicating with other groups throughout the preclass stage. Each activity has two aspects to it that must be completed successfully: independent learning and collaborative learning. As a result, students should

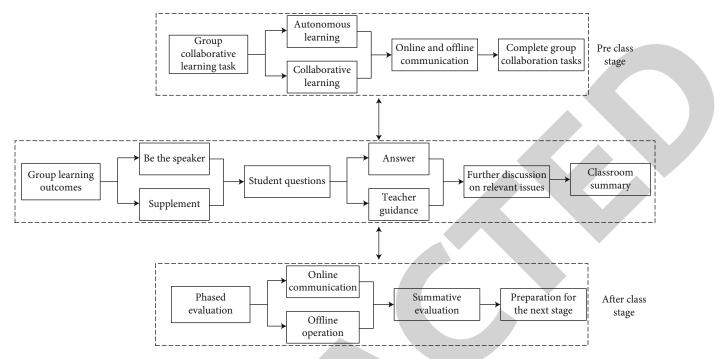


FIGURE 7: Management process of the salary increase evaluation stage in school-enterprise cooperation mode.

actively complete the online MOOC video learning work and share their learning experiences with the SPOC discussion area offline and face to face in order to assist students in completing the task. The classroom is the most important aspect of this stage. Students are the major speakers in a flipped classroom, according to the notion. Each group must choose a representative to report the learning outcomes, and other group members might provide additional information once the report is completed. When kids are unable to answer questions, teachers can assist them. According to each group's reports, teachers present essential discussion issues, guide students through active conversation, and encourage collision in thinking, all of which contribute to learning. The teacher finishes the offline SPOC learning by summarising the class.

3. Analysis of Experimental Results

The learning quality evaluation system built from the perspective of school-enterprise cooperation selects the opensource and free Hadoop cloud computing platform and realizes the functions of learning evaluation management of college users on it. In order to make the platform run efficiently and stably, the cluster is composed of five computers, one of which is the master of the name node management node. The other four are datanodes (as the slave node for storing data. All 5 computers are installed with VMware Workstation 10 virtual machine, and each virtual machine is installed with CentOS and Windows Server 2008 system; the database is the distributed nonrelational database hbase-0.94.7: Tomcat 7.0 is used as the network teaching software; the platform system is mainly developed in the Java language, so the cluster runs jdk1.7.0; Hadoop version is 2.2.0). The system adopts C/S architecture mode, and the client system can have iOS 6 and iOS 7 versions. The function of various terminal apps is to process information, including sending it to other people or devices and temporary storage. Without mobile terminal devices, mobile learning is weak, because its emergence makes the perspective of school-enterprise cooperation and mobile learning develops rapidly. In addition, with the development of computer technology, mobile terminals are more novel. Nowadays, there are a wide range of mobile devices. The learning terminal equipment and its characteristics are shown in Table 6.

Cloud deployment needs to assign different roles (technical roles), as shown in Table 7.

The network under the condition of big data provides a fast channel for distance education, which makes the design process of online evaluation system very simple. Taking the student's total subject score of 800 as the full score, the comparison of network distance teaching quality evaluation under different methods is shown in Figure 8.

As shown in the diagram, network distance teaching in the context of big data can not only increase students' performance but also save time, which is particularly useful for students who are unable to answer difficulties at home in a timely manner. Through the investigation of some teachers and students, the investigated objects are required to fill in and score the seven evaluation indicators in the teaching quality questionnaire according to the determined teaching quality evaluation indicators and the formulation of the teaching quality questionnaire. The value range of the evaluation indicators is set as [0, 9]. After summary, the results are shown in Table 8.

The data in the table are preprocessed according to the steps of the improved principal component analysis method

Device name	Carrying degree	Price	Operating system	Screen size	Network access
Learning machine	Good	High	Nothing	1-7 inches	Nothing
Tablet PC	Difference	High	Android, Apple	4-12 inches	Wi-Fi, 4G
Netbook	Difference	High	Windows	6-12 inches	Wi-Fi, 4G, 5G
E-book	Good	Low	Nothing	3-7 inches	Nothing
Intelligent mobile phone	Good	In	Android, Apple	2-6 inches	Wi-Fi, 4G, 5G
MP3	Good	Low	Nothing	1.4 inches	Nothing
Nonsmartphone	Good	Low	Nothing	1-5 inches	Nothing

TABLE 6: Learning terminal equipment and its characteristics.

TABLE	7:	Role	anal	vsis.
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Technical role	Learning activities	Support tools
Generation of learning resources	Read relevant learning materials	WAP learning website
Resource transfer	The teacher teaches in class	Video and other resource sharing
Result feedback	Classroom training or contact	MMS-based testing
Information modeling	Solve key problems	Some auxiliary tools
Information processing	Search for valid information	Internet, dictionary, etc.
Management knowledge	Summary of feedback results	Study calendar
Communication platform	Panel discussion	Communication software, etc.
Information sharing	Share	Cloud storage

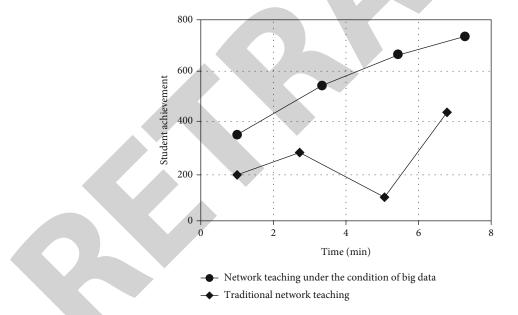


FIGURE 8: Comparison of network distance teaching quality evaluation under different methods.

TABLE 8:	Investigation	and analysis	of teaching	quality.

Sample serial number	Evaluating indicators S1 S2 S3 S4 S5 S6 S7					Evaluation objectives		
А	7	8	6	8	5	6	7.5	7.5
В	8	6.5	5	6.5	5	8	8.5	8.5
С	8.5	5	7	7.5	4	7	6	9

to obtain the eigenvalue, contribution rate, and cumulative contribution rate of the covariance matrix of the averaged original data, as shown in Table 9.

The greater the cumulative contribution rate, the less data information will be lost, that is, the more information including the original index. Generally, when the cumulative contribution rate of factors reaches more than 85%, the impact of relevant factors can be reflected. Therefore, the first four factors of the seven selected factors can be determined to replace the original variables. The improved

TABLE 9: Eigenvalue, principal component contribution rate, and cumulative contribution rate.							
Principal component	А	В	С	D	Е	F	G
Characteristic value	2.9852	1.8556	0.9235	0.4985	0.3985	0.3255	0.2521

7.82%

87.65%

13.18%

79.28%

method solves two problems: first, it can more comprehensively reflect the difference information of the variation degree of each index and the interaction degree of each index contained in the original data, so as to effectively avoid the loss of information; the improved results can more accurately reflect the information contained in the original data: the second is to use the mean method for dimensionless processing, which can extract more original information with less principal components, so as to reduce the workload and make the solution of the problem more perfect, more accurate, and more comprehensive.

38.65%

38.65%

27.35%

67.25

4. Conclusion

Characteristic value Contribution rate

Cumulative contribution rate

The organization philosophical and political showing mode will be a pattern of school training and showing change, which will uphold the top to bottom improvement of instruction and education somewhat, as the utilization of current organization innovation creates and turns out to be more broad. Numerous instruction specialists, researchers, and instructors are worried about the viability of organization philosophical and political education. To make the evaluation more in accordance with the genuine circumstance of organization education, the quality evaluation of organization philosophical and political education ought to be founded on the standards of organization learning climate and educational program characteristics, break down and construct the quality evaluation model of organization philosophical and political education, and figure out the relating showing evaluation pointers. We ought to likewise decide simple-to-involve evaluation pointers in the act of helping evaluation to make the evaluation more viable and give a few references to the improvement of organization philosophical and political education practice.

Data Availability

The data used to support the findings of this study are included within the article.

Conflicts of Interest

The author declares that he has no conflicts of interest.

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5.65%

92.89%

4.68%

96.58%

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3.58%

100.00%

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