

Retraction

Retracted: The Application of Interactive Effect Evaluation Model in the Teaching of College Mathematics Courses

Advances in Multimedia

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This article has been retracted by Hindawi, as publisher, following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of systematic manipulation of the publication and peer-review process. We cannot, therefore, vouch for the reliability or integrity of this article.

Please note that this notice is intended solely to alert readers that the peer-review process of this article has been compromised.

Wiley and Hindawi regret 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 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.

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- [1] J. Chen, "The Application of Interactive Effect Evaluation Model in the Teaching of College Mathematics Courses," *Advances in Multimedia*, vol. 2022, Article ID 6532439, 10 pages, 2022.

Research Article

The Application of Interactive Effect Evaluation Model in the Teaching of College Mathematics Courses

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Mathematics courses in higher education (advanced mathematics, linear algebra, etc.) are characterized by abstract concepts, many easily confused concepts, many nature theorems, and large amount of calculation of many difficulties. In most cases, due to the knowledge level, knowledge structure, and requirements of the teaching process, the traditional mathematics teaching adopts the straight-to-point approach to the introduction of mathematical concepts, and the explanation of property theorems mostly adopts the method of giving the theorems first and then analyzing and proving them for the calculation problems are mostly manual calculation. Educators are mainly concerned with how to organize teaching so that the trainees can acquire more knowledge, while ignoring the subject status of the trainees, and it is often related to the talents of higher education. The training goals are consistent. The traditional mathematics teaching only reflects a function of knowledge inheritance, but lacks the function of knowledge innovation. The lack of concept generation process in teaching makes the abstraction stronger; the lack of case analysis process makes the applicability weaken; and the serious separation of engineering problem solving and computer operation makes it lack of practicability. The current mathematics knowledge and curriculum make students in a passive position in the process of mastering basic knowledge. From the study about the present condition of the math education and the real requirement, the thesis will talk about content, characteristics, and the relationships for the practical education along with interactive teaching process. What is more, the ways of education and online education is able to be presented. At the same time, this paper also obtains the maximum weight value of each teaching quality evaluation index through analytic hierarchy process, introduces the quadratic fuzzy comprehensive calculation method of fuzzy operator, and determines the maximum component of the evaluation level as the final evaluation level according to the most subordinate degree criterion of fuzzy comprehensive evaluation. Especially in the formulation of teaching quality evaluation model in China, the qualitative description is processed quantitatively by the method of fuzzy mathematics and statistics, so that the qualitative index and the quantitative index are organically combined.

1. Introduction

The mathematics teaching concept advocated by the new standard puts forward “geometry activities should be based on children’s cognitive development level and their own professional knowledge and experience [1].” Teachers should also devote more time to mathematical games and sports to inspire children’s positive thinking [2]. In this way, they will really get the gist of the math problems and gain the knowledge of math and skills from the activities [3]. The great experience can be gotten through the procedure. The educational concept that students are the masters

of mathematics learning and teachers are the organizations of mathematics learners has put forward new and higher standard requirements for middle school mathematics classroom [4].

Bruner, an American psychologist, pointed out that information acquisition is an active behavior, and users should not become passive recipients of knowledge, but should become absolutely active participants in information acquisition [5]. It can be seen that the acquisition of knowledge must be the behavior of learners’ active acquisition, not just enjoy the results obtained [6]. However, the teaching process is different from the simple learning process [7].

Teaching activities are the processes of mutual interaction and common development between the educator and the learner [8]. Educators should communicate as much as possible [9]. The form of interaction enables the learners to actively participate in the process and obtain results [10]. From a functional point of view, the disadvantage of traditional mathematics teaching is that the learners are required to pay more attention to the existing results [11]. The active learning process of this outcome is ignored [12].

The old education way to teach maths will lead to the low efficiency from the surface level and will influence the learners' observation, exploration, and integration. It plays an important role in cultivating new talents in higher education [13]. Observation is the basis and premise of knowing things, as Darwin said: "I am beyond the middle level in the ability to perceive those fleeting things and make fine observations on them." It can be seen that observation ability is very important in talent training [14]. Exploration is a deep understanding of things [15]. It is necessary to ask possible questions based on observation results and combine observation results with existing knowledge to seek solutions to problems [16]. Hua Luogeng once said: "scientific discoveries can only be given to those who are literate in learning, and those who are good at independent thinking [17]." Integration is a comprehensive understanding of things, which requires the reorganization of fragmented observations and exploration results into a knowledge structure suitable for individuals, is an important prerequisite for the promotion of knowledge application [18].

By applying observation, exploration, and integration to course teaching, students can gradually and actively participate in the entire learning process from lower-level observation to higher-level integration, discover information through observation, understand information through exploration, and construct information through integration. In the teaching process, teachers mainly guide students to participate in the learning process in a timely manner. However, it should be noted that the teaching based on observation, exploration, and integration still lacks the training of students' operational ability [19]. Therefore, combined with the characteristics of engineering mathematics, the practice link is introduced into the course teaching. As Feuerbach said: "those problems that theory cannot solve, practice will solve for you." Through practice, students can have a deeper understanding of the theory; through practice, students know that "mathematics is useful and mathematics can be used" [20].

Hence, from the study about the present condition of the math education and the real requirement, the thesis will talk about content, characteristics, and the relationships for the practical education along with interactive teaching process. The thesis will employ the 2 grade obscure calculation and assessment.

2. State of the Art

2.1. Overview of Interactive Mathematics Teaching. The word "interaction" is interpreted as "alternation; change; mutual" in the modern Chinese dictionary. There are two

kinds of English words corresponding to "alternation" and "interaction" [21]. Put forward the idea of "interaction" in mathematics classroom teaching, and that it is more appropriate to take the English word interaction. From the Chinese and English meaning of interaction, it is easy to know that the interaction implies that activities should be held to enhance the communication taking place among teachers and students to further improve the common comprehension. From the perspective of journalism and communication, it belongs to a part of human external communication and is the main form of human subject activities in journalism mathematics classroom teaching [22]. The specific definition of classroom communication is not explained in the education dictionary, but it often exists in the form of classroom communication, classroom teaching interaction, and classroom teaching communication in various teaching and scientific research documents [23]. Compared with these three concepts, classroom interaction can more accurately reflect the dynamic process of interdependence, interaction, and communication between teachers, classes, and students in the classroom [24]. Mr. Zhong also pointed out that the essence of education is communication and interaction, the connection between teachers and is the interactive relationship in communication, and the connection between educators and educatees is the partnership of interactive subjects. Therefore, if we think it, it is reasonable and effective to use the concept of interaction in mathematics classroom teaching [25].

The new curriculum standard is the essence of the concept of mathematics education. Mathematics communication education refers to the awareness and emotional experience activities of multidirectional communication, interaction, and cooperation between schools and teachers and schools and students in the process of mathematics education. It embodies the content essence of the mathematics education concept of the new curriculum standard [26]. The new curriculum standard has repeatedly mentioned "cooperation and communication" and "communication of thinking process," which fully reflects the basic idea of "interactive teaching of mathematics" in the new curriculum standard [27]. The theory of mathematics interactive curriculum involves not only reconstructing the role of teachers in mathematics classroom but also reconstructing the digital classroom environment. This paper expounds the significance and nature of digital interactive courses and discusses the interactive methods of specific mathematics courses; it not only includes the summary of mathematics education thought but also requires the thought to be verified in practice [28]. In order to study digital interaction, this study plans to build a digital interaction model and carry out practical exploration. Its purpose is to serve the implementation of the mathematical education thought in the new curriculum standard.

2.2. Characteristics of Interactive Classroom Teaching of College Mathematics. The interaction of mathematics classroom teaching requires a harmonious interactive situation. Teachers and students and students and students should have harmonious feelings, harmonious relationship, less

conflict, small psychological distance, and there should be mutual needs and desires [29]. If there is a great spiritual distance, different mentality, and different interests between teachers and students and students and schools, it will be difficult for teachers to complete the courses according to students' requirements, and students will also be difficult to actively cooperate with teachers. The classroom teaching interaction that promotes the development of the school naturally cannot be realized. In order to create a harmonious environment and interactive situation, teachers play a key role [30].

In the classroom, although teachers and students become the main body of communication, there are various forms of communication. By the interaction of the teachers and students, the guide will know more about the study condition. In this way, the needs of both sides will be met by the activity—its spirit of cooperation and mutual assistance.

The effect of classroom interaction can be divided into three stages: one is false interaction. It is mainly reflected in that teachers ignore the actual needs of students and only participate in classes according to their own wishes and interests. It listens to students' loud answers to "understanding" questions, but does not pay serious attention to students' actual mastery. To put forward their own needs, students' learning activities and teachers' lectures are completely separated. These interactions only interact in some form, which is invalid interaction, that is, false interaction. The second is reactive interaction. This kind of effective interaction refers to the requirements that arouse the interest of interaction when the teacher sends out the requirements, or when the students send out the requirements or explain the needs, and then the interaction is realized. It has certain passivity. Third, effective interaction with. This level of language communication is the goal that must be achieved in mathematics classroom teaching. Teachers and students should carry out organized, purposeful, and active activities in classroom activities from beginning to end.

2.3. Implementation Effect and Existing Problems of Interactive Teaching. Compared with the previous teaching situation, the linear algebra course teaching is organized with the help of interactive teaching. Students acquire mathematical knowledge through observation, exploration, integration, and practice, and generally feel that mathematical concepts are no longer abstract. Students have a certain ability to observe materials and information, gradually increase their ability to think independently and collaboratively explore problems, integrate acquired information and knowledge, and improve their ability to solve practical problems with computers. Participate in various engineering competitions year by year. This shows that the students' mathematical modeling ability has been exercised and cultivated, and the quadruple interactive teaching has achieved initial results. However, in the process of implementing this teaching method, some problems have also been exposed. For example, individual student cannot clearly understand the observation materials provided, which may be due to the complexity of the selected materials and strong professional knowledge; the shortage of true questions. What is

more, the ending data is short of the target and strictness. The most important one is that it is enough to clarify the main one and the minor one, and the problem analysis is not all-around. The capability to use hands and the study to the computer programme. In the process of the teaching, the time in class is very tight and limited. All this requires continuous optimization of the effective connection of the four aspects of the teaching method and effective handling of the interaction between teachers and students in future teaching.

3. Methodology

3.1. Analysis of the Demand for Mathematics Teaching in Fuzzy Comprehensive Universities Based on AHP. Teaching quality evaluation refers to the evaluation of the whole educational process by using theoretical and technical methods. But, this is not only a theoretical problem, but also a practical problem. The so-called quality assessment is to determine the distance between the current situation of education and the expected goals. Quality assessment can effectively promote the evaluated object to further approach the expected goal, so as to achieve the purpose of constantly improving education, changing the teaching environment, and improving teaching. Different evaluation subjects should choose different evaluation factors and evaluation criteria. Therefore, quality evaluation is a complex, arduous, and systematic comprehensive evaluation process.

Teaching evaluation is a very critical and rigorous work. It focuses on teachers and the results of their teaching activities. Through evaluation, teachers can use the teaching evaluation results to grasp the actual situation of students, find new problems in classroom teaching, so as to determine the new direction of efforts in classroom teaching and to reflect on and improve students' own classroom teaching process and teaching methods. At the same time, through the evaluation results, it can also provide decision-making basis for students, including important basis for the decision of teaching reform and reference basis for teachers' personnel decision. Through the evaluation of teaching results, a safe and feasible way is created for the information exchange among teachers, students and teachers, schools and students. In this way, schools can also show students' views on school teachers' teaching, school curriculum, teaching facilities, etc., so that students and teachers can better understand the development needs and trends of schools, and teachers can also show students' suggestions on school curriculum system and school teaching facilities, as well as educational funds.

AHP algorithm is a qualitative and digital decision analysis method. It is a step to model and quantify the decision-making thinking of managers of complex information systems. Using this method, the manager can divide the complex problem into several stages, and then after a brief factor comparison and calculation, the relative weight of each method can be obtained, which provides an important basis for selecting the optimization method. The basic principle of 0-12 analytic hierarchy process is to evaluate the method by using the factors such as objectives (principles), constraints, and departments, define the discriminant matrix

TABLE 1: Different user role table.

Different usage roles	Department	Responsibilities	System features
Department head	Corresponding faculty	Participate in the customization and maintenance of teaching quality evaluation model and manage, supervise, and analyze the teaching quality evaluation of teachers in the department	Participation in the actual requirements of this system of this system, is the users
Classroom teachers	Corresponding major	Review my own teaching quality evaluation and analysis results and evaluate the teaching quality of teachers in the same department	The user of the system is also the object of evaluation of the system
Academic administrators	Faculty	Complete the management of the teaching quality evaluation data of the college, check the teaching quality evaluation and analysis results of the college, and the teachers of this semester	The person who is involved in the formulation of the actual requirements and the final use of the system
Students	Professional college	Responsible for evaluating the teaching quality of the teachers	The user of the system

in the way of binary relativity, then take the eigenvector score corresponding to the maximum eigenvalue of the discriminant matrix as the corresponding coefficient, and finally synthesize the results of various methods.

According to the current survey results of teaching quality evaluation methods in some colleges and universities, there are still some schools that use traditional teaching quality evaluation methods for evaluation. Using sample surveys to assess the quality will cost great human and material resources as well as time. What is more, it is a trouble to assess the data by human hands, the feedback and the information will not be timely and all-round. The role in promoting further teacher development is negligible. The fuzzy comprehensive teaching evaluation system we provide is an application system that evaluates the teaching quality of teachers through the campus network, obtains the evaluation results in real time, and automatically makes the evaluation. The obtained results are analyzed and fed back through the fuzzy teaching evaluation module.

The different roles, specific responsibilities, and characteristics of the teaching quality evaluation system are shown in Table 1.

3.2. Design of Fuzzy Comprehensive University Mathematics Teaching Quality Evaluation System Based on AHP. Fuzzy comprehensive quality evaluation management system is an application management system that uses campus network to evaluate and analyze the quality of teachers. It is mainly used by school teaching managers, teachers, and students. The major purpose will be the following ones: the data collection for a long time; the digital process and information process of the data about the teaching assessment by the school network; the resources will be commonly shared by the users. At last, the system of the assessment will meet the practical needs. The evaluation results facilitate the sharing of data query and analysis; different evaluation index systems and weights meet the current practical needs of various evaluation purposes.

The fuzzy comprehensive teaching quality evaluation system based on AHP adopts B/S (browser/server) structure. This structure is suitable for both the campus network and the Internet. Users can evaluate teaching quality through the Internet anytime and anywhere. If the evaluation index needs to be adjusted, the client can use it directly without any reset or programming. Its system architecture is shown in Figure 1.

This system is a system to evaluate teachers' teaching quality by using school campus network. Its network topology is shown in Figure 2. Its network topology can be simply divided into four aspects in the figure.

In view of the status differences of various factors in teacher quality assessment, the weight relationship can be set according to the role of all parties in teacher evaluation. This chapter mainly judges the relative weight set between the main standard layer and the substandard layer of each factor through the analytic hierarchy process, the specific method is shown in Figure 3.

First, for the factors with relatively concentrated contrast factors, we should use the influence of nine level contrast method: 1, 2, 3, 4, 5, 6, 7, 8, and 9 contrast effects. Therefore, the teaching attitude is shown by $X - 1$, and the content is shown by $X - 2$. The comparison result $X - 1$ shows the importance of the teaching attitude compared with the content, and the comparison result $X - 1$ shows the seriousness of the content compared with the teaching attitude. In this way, the above influencing factors can be integrated, and at the same time, a paired evaluation matrix can be established, such as the judgment matrix (1) to interpret the matrix A .

$$A = \begin{bmatrix} x_{11} & x_{12} & L & x_{1n} \\ x_{21} & x_{22} & L & x_{2n} \\ M & M & L & M \\ x_{n1} & x_{n2} & L & x_{nn} \end{bmatrix}. \quad (1)$$

According to the proportion of different quality

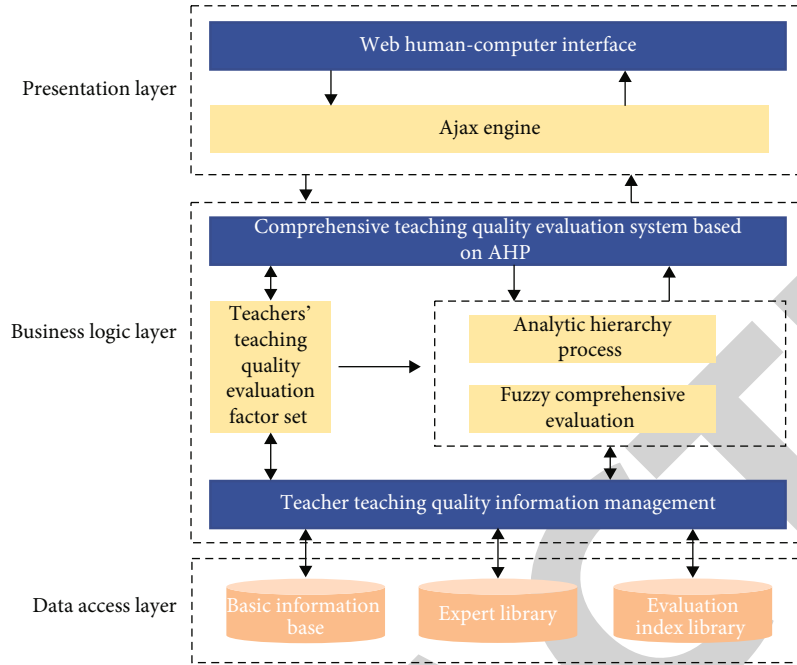


FIGURE 1: System architecture diagram of the comprehensive evaluation system of college mathematics teaching quality evaluation system based on AHP.

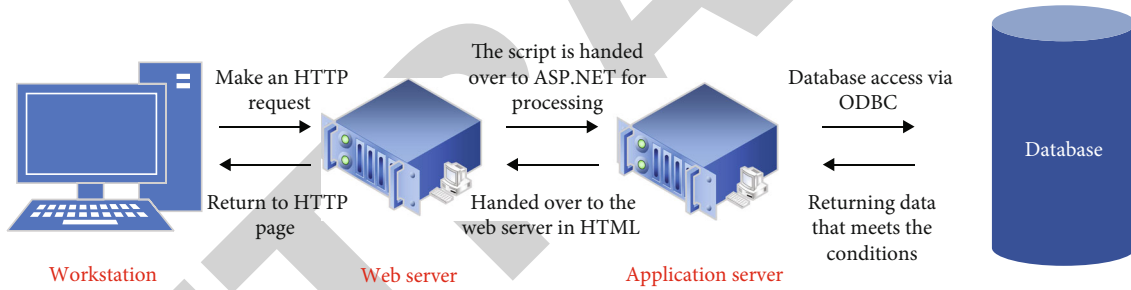


FIGURE 2: Network topology diagram of the comprehensive evaluation teaching quality evaluation system based on AHP.

evaluation factors in the system, experts compare various factors that constitute the same quality grade in each index level of an index layer, and then determine the proportion according to the table of relative importance in Table 2.

Based on the method of establishing the discriminant matrix as described above, the main criterion layer can also establish a fourth-order discriminant matrix A , as shown in Formula (2). For four specific single factor sets in the sub-criterion layer, four discriminant matrices A of different orders can be established, which are n , respectively. A total of five discriminant matrices can be obtained, namely Formulas (3)–(6).

$$A = \begin{bmatrix} 1 & \frac{1}{3} & \frac{1}{4} & 2 \\ 3 & 1 & \frac{1}{2} & 7 \\ 4 & 2 & 1 & 8 \\ \frac{1}{2} & \frac{1}{7} & \frac{1}{8} & 1 \end{bmatrix}, \quad (2)$$

$$A_1 = \begin{bmatrix} 1 & 4 & 3 & 3 & 2 \\ \frac{1}{4} & 1 & 1 & \frac{1}{2} & \frac{1}{3} \\ \frac{1}{3} & 1 & 1 & \frac{1}{2} & \frac{1}{3} \\ \frac{1}{3} & 2 & 2 & 1 & \frac{1}{2} \\ \frac{1}{2} & 3 & 3 & 2 & 1 \end{bmatrix}, \quad (3)$$

$$A_2 = \begin{bmatrix} 1 & \frac{1}{2} & \frac{1}{3} & 2 & 1 \\ 2 & 1 & \frac{1}{2} & 5 & 4 \\ 3 & 2 & 1 & \frac{1}{2} & 3 \\ \frac{1}{2} & \frac{1}{5} & 2 & 1 & \frac{1}{2} \\ 1 & \frac{1}{4} & \frac{1}{3} & 2 & 1 \end{bmatrix}, \quad (4)$$

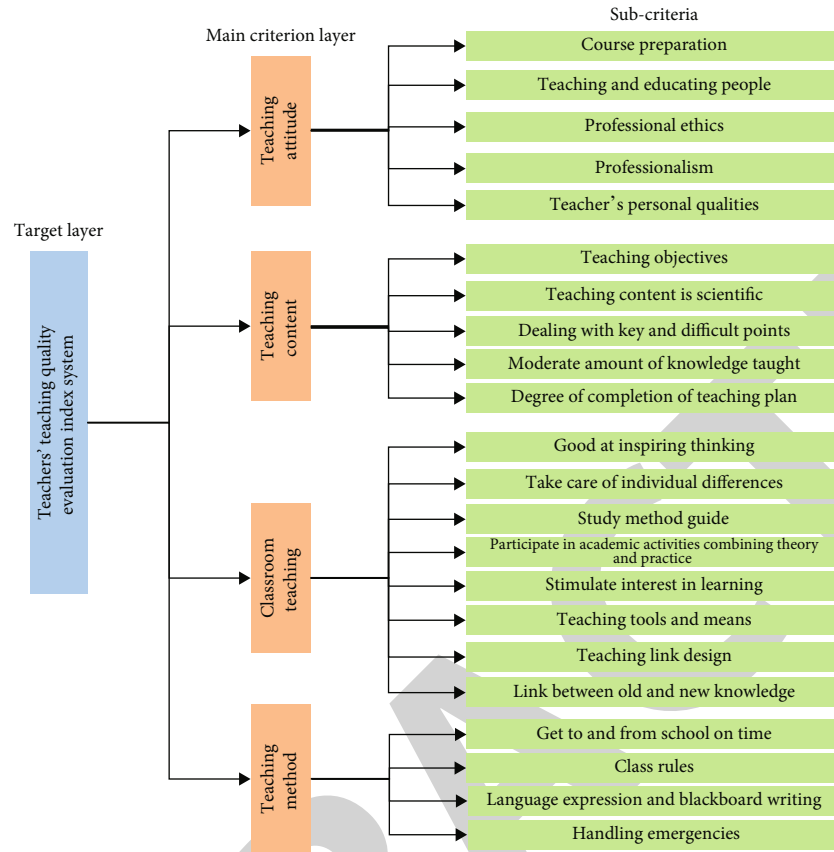


FIGURE 3: Teachers' teaching quality evaluation index system.

TABLE 2: Relative importance value table.

Scale	Meaning
1	Indicates that the factors X_i and X_j are of equal importance
3	Indicates that factor X_i is slightly more important than X_j when compared with X_j
5	Indicates that factor X_i is significantly more important than X_j when compared with X_j
7	Indicates that factor X_i is more strongly important than X_j when compared to X_j
9	Indicates that factor X_i is extremely more important than X_j when compared with X_j
2, 4, 6, and 8	2, 4, 6, and 8 denote the median of adjacent judgments 1-3, 3-5, 5-7, and 7-9, respectively
Countdown	X_{ij} denotes the judgments of factor X_i compared with X_j , then X_j compared with X_i , $X_{ji} = 1/X_{ij}$

TABLE 3: Judgment matrix RI value table.

n	1	2	3	4	5	6	7	8	9
Rotary international	0.01	0.02	0.60	0.92	1.22	1.29	1.35	1.42	1.50

TABLE 4: Username summary.

Field name	Data type	Length	Allowed null value	Description
Number	Char	5	×	
User ID	Varchar	12	×	
Password	Varchar	20	×	
User category	Char	2	×	01: System administrator 02: Faculty and department heads 03: Academic affairs office, supervisory office 04: Academic staff 05: Faculty 06: Students

TABLE 5: Basic information of teachers.

Field name	Data type	Length	Allowed null value	Description
Teacher ID	Varchar	12	×	Unique identifier teacher
Department	Varchar	10	×	
Name	Varchar	30	×	
Gender	Varchar	20	×	Default value: Female
Date of birth	Date/time	8	√	
Current address	Varchar	40	√	
Contact number	Varchar	11	×	
Email	Varchar	30	√	
User category	Char	2	×	Default value: 05 05 means teacher class

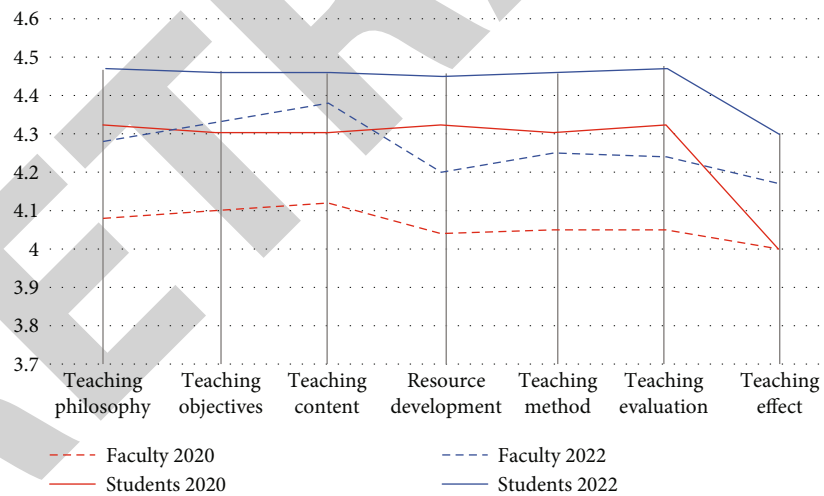


FIGURE 4: Comparison of online teaching quality evaluation between teachers and students.

$$A_3 = \begin{bmatrix} 1 & 4 & 1 & 4 & 2 & 4 & 2 & 1 \\ \frac{1}{4} & 1 & \frac{1}{3} & 1 & \frac{1}{3} & 1 & \frac{1}{2} & \frac{1}{3} \\ \frac{1}{4} & 3 & 3 & 4 & 1 & 4 & 2 & 1 \\ \frac{1}{2} & 1 & \frac{1}{4} & 1 & \frac{1}{3} & 1 & \frac{1}{2} & \frac{1}{3} \\ \frac{1}{4} & 1 & \frac{1}{4} & 1 & \frac{1}{3} & 1 & \frac{1}{2} & \frac{1}{3} \\ \frac{1}{2} & 2 & \frac{1}{2} & 2 & \frac{1}{2} & 2 & 1 & 1 \\ 1 & 3 & 1 & 3 & 1 & 3 & 1 & 1 \end{bmatrix}, \quad (5)$$

$$A_4 = \begin{bmatrix} 1 & \frac{1}{2} & \frac{1}{4} & 1 \\ 2 & 1 & \frac{1}{2} & 3 \\ 4 & 2 & 1 & 5 \\ 1 & \frac{1}{3} & \frac{1}{5} & 1 \end{bmatrix}. \quad (6)$$

Take the average of each row vector of the judgment

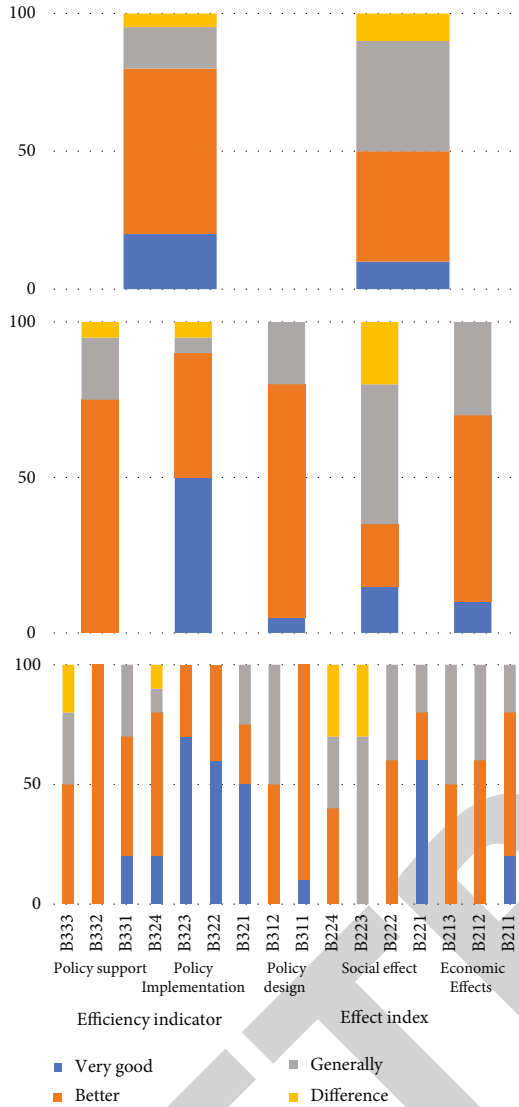


FIGURE 5: Teacher evaluation results.

matrix A , assuming that the vector is obtained:

$$\bar{W} = [\bar{w}_1, \bar{w}_2 \cdots \bar{w}_n]. \quad (7)$$

Then normalize it, that is

$$\tilde{W}_i = \frac{\bar{w}_i}{\sum_{j=1}^n \bar{W}_j}. \quad (8)$$

An approximation of W can be obtained because

$$\lambda_{\max} \approx \frac{(1/n) \sum_{i=1}^n (AW)_i}{\tilde{w}_i}. \quad (9)$$

The required eigenvector solution is the importance ranking of each teaching quality evaluation factor in its corresponding criterion layer, that is, the weight value of each

teaching quality evaluation factor in its corresponding criterion layer that the author wants to obtain.

3.3. Carry out a consistency check. When detecting the general consistency of matrix data, the calculation formula $cr = ci/ri$ is used as the detection, where CI is the general consistency index of matrix data, and the calculation formula is in Formula (10).

$$CI = \frac{1}{n-1} (\lambda_{\max} - n) \quad (10)$$

RI is the random consistency index of the average value of the decision matrix, and the average RI value of the decision matrix is given in Table 3. For a negative ninth order decision matrix, when $cr < 0.1$, it can be found that there is satisfactory consistency in the decision matrix, which indicates that the distribution of weight coefficients is correct; otherwise, the decision matrix must be adjusted until the ideal result consistency is achieved.

4. Result Analysis and Discussion

4.1. Database Design. The fuzziness and evaluation of teachers' quality cannot be separated from educational database. Because of the various elements in the teacher assessment indicators, the weights of various factors and the basic data of the teachers participating in the assessment should be saved to the information base. The background database of this teaching quality evaluation system is designed with SQL server 2000 software. The whole design process combines database design and teaching quality evaluation application to design the database so that it can store data effectively and without redundancy to meet the needs of various users application requirements. In order to ensure the reference security of data, excessively reduce the redundancy of table information, and strengthen the connection function between tables in the query process, but the connection operation between the tables will be increased during the query, which will occupy the system resources and reduce the system response time. Therefore, if you want to increase the response time of the system, appropriate data redundancy measures are also essential.

The database used in this paper includes basic information database and expert database. The basic information management database is divided into school basic teaching information table, each class basic information management table, each class teacher information management table, each class teacher information management table, course selection information management table, etc. The management personnel of the academic affairs office, the teaching staff, teachers, and students, as experts, evaluate the teaching quality of teachers, and also need a general list of system user names, as shown in Table 4.

Teachers are special, they are both the evaluator and the evaluatee. Taking the basic information table of teachers as an example, a database table is established, as shown in Table 5.

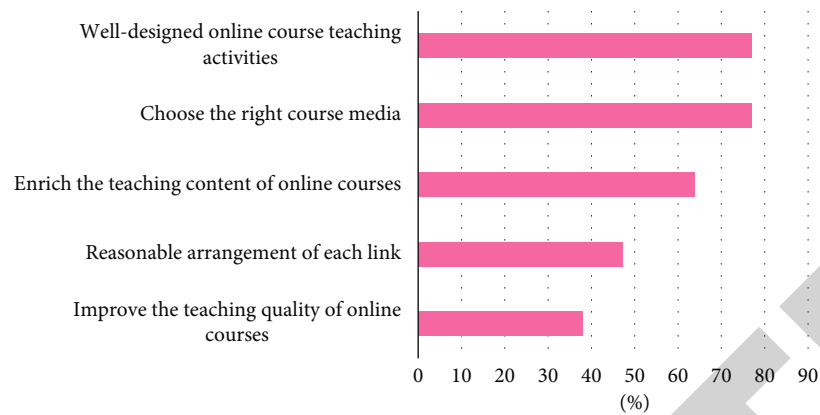


FIGURE 6: University interactive mathematics experiment results.

4.2. Experimental Results. The quality evaluation system is tested in the campus network. Only after they register through the school ID and password can they confirm the online teaching quality of each subject purpose in this semester. The evaluation results are shown in Figure 4. These results will remind people that 2022 students have the highest level of college mathematics teachers, score about 4.5 points (5 points), and teachers in 2020 evaluation is the lowest, score about 4 points, and in students and teachers for the score of teaching effect is generally lower than the teaching concept, teaching objectives, etc.

Teachers must register through the teacher ID and password before they can evaluate the teaching of teachers in the same department. If he does not participate in the review, he will not be able to view his review results. The results of teacher evaluation are shown in Figure 5. Under the influence of policy implementation, college mathematics teachers believe that the quality of interactive teaching is the best, while for the current interactive teaching policy support, the general evaluation is low. It shows that the school also needs to optimize and upgrade the supporting facilities for interactive teaching.

Figure 6 shows the use of fuzzy comprehensive evaluation method to expand the impact factor comment set as $U = \{\text{very good, good, average, poor}\}$, the factors that affect mathematics teaching are teaching attitude, teaching ability, and teaching effect. For lesson preparation, class, tutoring, homework and examination, and teaching and educating people. Teaching ability is divided into scientific and extensive teaching, teaching methods, oral expression, and writing on the blackboard; "The situation of mastery, the improvement of learning methods and ability, and the increase of students' enthusiasm for learning." When course teaching activities are carefully designed around teaching objectives, course types are properly selected and teaching resources are sufficient, the evaluation results of interactive experiments are the best, at 76.92%, while the lowest evaluation results of interactive teaching in the improvement of online course teaching quality are 37.91%.

5. Conclusion

The paper selectors start from the microlevel, take the university mathematics classroom as the main observation point, and explore the overall interaction of the mathematics

classroom, so as to realize the need for the concept of mathematics classroom put forward in the new national mathematics curriculum standard, which is also an attempt to further improve the effectiveness of the university mathematics classroom. The thesis will include the 4 parts: the assessment of the teaching quality ways based on the analysis, the protection of the model of the education assessment, the analysis on the education quality evaluation, and searching and printing. In this regard, the evaluation and analysis of the current higher education teaching quality evaluation management system have been improved. The research and in-depth implementation of the system not only separated the school from the heavy educational evaluation management system but also further saved the school's human resources, material, and financial resources. In addition, the establishment of this platform not only completes the long-term effective management of teacher assessment information but also enables online assessment and consultation of teacher assessment results.

Data Availability

The labeled data set used to support the findings of this study is available from the corresponding author upon request.

Conflicts of Interest

The author declares that there are no conflicts of interest.

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