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Retraction

Retracted: Construction of Mathematics Teaching Environment Based on Big Data on the Wisdom Cloud Platform of Higher Vocational Education

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1].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] X. Sun, X. Huang, H. Yu, and X. Liu, "Construction of Mathematics Teaching Environment Based on Big Data on the Wisdom Cloud Platform of Higher Vocational Education," *Journal of Electrical and Computer Engineering*, vol. 2022, Article ID 4348613, 11 pages, 2022.

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Research Article

Construction of Mathematics Teaching Environment Based on Big Data on the Wisdom Cloud Platform of Higher Vocational Education

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As a public basic course in the system of higher vocational colleges, mathematics has received more and more attention from education administrators. However, there are still problems in higher education that mathematics teaching resources are scatter and data are difficult to integrate. Big data (DT) and smart clouds are the burgeon of intelligent technology, which has provided support for teaching informatization and teaching data integration in colleges and universities. This article aims to solve the problems of mathematics teaching in higher vocational education, such as more content and less class hours, difficult, higher vocational education due to the expansion of enrollment, and the decline in mathematics teaching quality, and build a smart cloud platform based on big data mathematics instructing environment system and mathematics wisdom instructing. The reconstruction of the environment is the deep integration of information technology and mathematics instructing, which can promote the deep integration of information technology with teaching, management, and environment. The experiments in this article show that the application of the smart cloud platform to mathematics teaching can greatly increase students' enthusiasm for learning and improve the school's mathematics teaching level, and the improvement rate of students' performance can reach 99.89%. The research in this article is of great significance to the adjustment of mathematics teaching environment in higher professional education.

1. Introduction

1.1. Background. In recent years, with the adjustment of national policies, the scale of higher vocational education has continued to expand. However, the expansion of school enrollment has led to the problem of a decline in the overall quality of students. In addition, advanced mathematics is an important public basic subject, and its textbooks are theoretically strong. This makes it difficult to grasp. Even with the advancement of the national education reform, higher vocational colleges have adjusted and improved the curriculum and instructing content of various majors for the sake of improving the instructing level of higher mathematics. At the same time, they have also improved the requirements for the instructing level and broad learning ability of teachers in higher vocational colleges, which further increase the difficulty of mathematics and teachers' instructing. In addition, smart cloud technology has also begun to be used in all aspects of our lives, and it has also brought opportunities for innovation in our education field. The online and offline instructing mode is advocated by a large number of senior managers in the education field; in particular, the online courses on the MOOC platform are respected by teachers. Therefore, mathematics for higher vocational education has also begun to use various science and technology to enter the development of online courses.

1.2. Meaning. This article focuses on the construction of the mathematics instructing and education environment of the wisdom cloud platform in higher vocational colleges and aims to solve the existing problems in mathematics instructing in higher vocational colleges. At the same time, the mathematics teaching environment has been innovated and the quality and level of teaching have been improved. By constructing a mathematics instructing environment on a smart cloud platform, an instructing model combining online and offline mathematics teaching is realized, and the contradiction of more content and less time is alleviated; students can get in touch with instructors in time through the smart cloud platform online and through the smart cloud platform after class. We solve the problems left over in the classroom, make sure that all questions are answered, to achieve interactive learning in class, offline, and online, and optimize traditional teaching. We improve students' learning efficiency and overall instructing level; in addition, with the broaden of school recruit students, the number of students has increased sharply, and the problem of insufficient teacher resources can be compensated through online courses to guarantee instructing quality and the completion of usual teaching activities. For students with relatively weak mathematical foundations and those whose offline classrooms cannot keep up with the pace of instructors, they can use the smart cloud platform to learn, which can better promote the learning of mathematics subjects; finally, the mathematics teaching environment built through the smart cloud platform can effectively record students' learning data, integrate their mastery of advanced mathematics, and facilitate instructors to adjust instructing methods.

1.3. Related Work. The enrollment expansion of higher vocational colleges, the development of science and technology, and the introduction of online courses have made in-depth research on how to improve the instructing quality and level of higher vocational colleges, especially in the teaching of higher mathematics. Among them, Liu *X* analyzed the questionnaires of enterprises' demand for talents and pointed out that in the current higher vocational mathematics teaching, the penetration of mathematics culture is insufficient, and there is a certain degree of uncoupling between higher vocational mathematics instructing and mathematics culture. The above puts forward a way to infiltrate mathematics culture in higher vocational mathematics instructing [1]. Zhong gave an overview of the O2O teaching model of higher vocational mathematics and proposed an evaluation and evaluation system based on the MOOC-based O2O teaching model of higher vocational mathematics to provide students with a learning platform for autonomous exploration and creation of learning situations [2]. Zhou researched the combination of mobile Internet technology with classroom instructing and instructing materials, building a flipped classroom model of mathematics teaching, and solving the problem of disconnection between teaching software and teaching materials in the instructing procedures, for the sake of comprehensively improving the level of mathematics learning in terms of time and space, and achieve boundary learning [3]. Xenofontos C's research puts forward a strong connection between instructors' self-efficacy and factors such as instructing quality and student performance, and reveals four themes for instructors to construct mathematics instructors' self-efficacy [4]. Martínez proposed a blended learning instructing model. The face-to-face part of this instructing model allows spontaneous communication and collaboration to build knowledge in a real environment [5]. Hong HY's research explores the practice and beliefs of instructors in educating students to develop adaptive mathematics teaching in a networked knowledge construction environment under the guidance of principle-based design, and proposes that this form may encourage participants to gradually practice more adaptive teaching. We promote their development toward a more constructivist-oriented mathematical belief [6], whereas these studies have carried out in-depth discussions on the instructing of mathematics.

However, no corresponding solutions have been proposed for the problem that teachers and students cannot communicate with each other after class, nor have they noticed the difficulty of higher mathematics textbooks, have not started from the textbooks, and have not considered comprehensively; in addition, they have not addressed the teaching environment. The innovation proposed adjustment measures.

1.4. Innovation. This article has the following innovations for the construction of the mathematics instructing environment of the smart cloud platform of higher vocational colleges based on big data: (1) combining the big data technology to integrate and analyze the data of mathematics instructing, so as to promote the teaching level and quality. The visualization of teaching data promotes the intelligent informatization of teaching data; (2) designing a smart cloud mathematics classroom, using tablet computers, smart phones, and other electronic products as the carrier, using cloud teaching as the medium to break the limitations of time and space so that students can take courses online anytime, anywhere, and at the same time make the connection between instructors and students closer, and facilitate the development of mathematics teaching work; (3) combining the current relatively advanced project curriculum development model and work process systemic curriculum model, the less researched public basic course of higher vocational education-mathematics curriculum reform ideas; and (4) the previous mathematics assessment methods are only based on classroom performance and final examination scores. This article has innovated the mathematics teaching assessment methods of higher vocational colleges, allowing the intelligent evaluation results, online test scores, and final offline test scores of the smart cloud platform to be calculated examination results, make the mathematics assessment method more fair and just, and better reflect the students' mathematics level.

2. The Construction Method of Mathematics Teaching Environment Based on Big Data of Higher Vocational Education Wisdom Cloud Platform

2.1. Smart Cloud Platform Based on DT. Smart technology that combines DT and smart cloud has already been applied to all sides of society, such as our smart city, which is developed from a digital city, and grasps the development direction of future cities in terms of space and time. The application scenarios of smart cities are shown in Figure 1.

The application of smart city is far more than the scenarios involved in Figure 1, but also includes other such as smart parks and smart municipalities. The emergence of smart cities is based on DT technology and smart cloud platforms. DT is a huge database. The large scale of data in it cannot be acquired, managed, processed, and sorted out by mainstream software tools in a reasonable time. Therefore, it is necessary to intelligentize the data information in DT [7]. The huge amount of DT storage is due to its huge capacity storage server, we can store data information in big data storage, and then, big data will give the data information intelligence and classify and integrate this data information. The building of a wisdom school yard is based on a new development under the smart city. On account of the original digital school yard, it has developed into the current smart campus, for example, our MOOC courses, and students can learn on the MOOC platform, and the background will record students' study time and study effect, which are based on the construction of DT and smart cloud platform. The construction of a smart cloud platform can monitor various data in space and time, which will be intelligentized by big data and then intelligently analyzed and integrated. The processing of DT for information is divided into batch processing and stream processing, as well as a combination of the two processing modes. The internal principles of each processing mode are different. The principles of batch processing are as follows.

The framework used for batch processing is Apache Hadoop. Hadoop is the first DT processing framework that has received great attention in the open-source community. Its native MapReduce engine mainly adopts the "divide and conquer" distributed computing model [8]. The calculation formula is as follows:

$$Q_1 = \sum_2 b^2 * R_b * \varphi, \tag{1}$$

where Q_1 represents the data information displayed after processing, and this is the data analysis that can be directly extracted on the smart cloud platform, and b represents the batch number of this batch, so as to record the batch of data, R. It is the data flow allocated on each batch of data streams. The φ in (1) is a data element matrix generated by DT in batches

$$\varphi = \begin{Bmatrix} b_1 & b_3 & \dots & b_{(2n-1)} \\ b_2 & b_4 & \dots & b_{2n} \\ b_3 & b_6 & \dots & b_{3n} \\ b_1 & b_2 & \dots & b_n \end{Bmatrix}. \tag{2}$$

The representative framework of the stream processing mode is Apache Storm, which is a stream processing framework that focuses on low latency. It processes a steady stream of stream data in a near real-time manner. The data processing delay can reach subsecond level [9], which can be said to be a kind of the fast-processing mode, and the calculation principle is as follows:

$$Q_2 = \frac{\sum_s P * A}{2} * \phi. \tag{3}$$

In (3), s represents the speed of data stream processing. In this process, the huge amount of data information will delay the speed of stream processing. In this delay speed, internal information processing will be shunted. A means the number of diverted streams, and P means the flow rate of data during processing. The form of the metadata matrix generated in the loss of data shares is as follows:

$$\phi = \begin{Bmatrix} A_1 & P \\ P & A_N \end{Bmatrix}. \tag{4}$$

The last processing mode is the combination of the previous two data processing modes, batch processing plus stream processing, and its typical representative framework is Apache Spark [10]. Spark is a data processing mode that is particularly suitable for the huge amount of data in the present information era. The principle is as follows:

$$Q = \sum_s^b R_b * A^p * \eta. \tag{5}$$

The form of η is as follows:

$$\eta = \begin{Bmatrix} A_1 & b_{2n} & b_4 & P \\ P & b_1 & A_1 & b_3 \\ b_n & P & \dots & A_N \\ b_2 & b_{(2n-1)} & A_N & P \end{Bmatrix}. \tag{6}$$

The three data processing modes of DT can comprehensively analyze the data in time and space, and present the data in a three-dimensional space, which allows people to see the changes in the data more clearly and intuitively. The data extraction flow chart is shown in Figure 2.

In this way, the user can get a specific data analysis table to compare the remaining historical data and draw the final conclusion. In instructing, using DT to coordinate the learning data of students in the smart cloud platform can enable instructors to analyze the learning situation of each student from these learning data and then adjust their own instructing plans to improve their own teaching level.

2.2. Mathematics Teaching Environment of Higher Vocational Education. In higher vocational education, there are still many problems; in particular, the instructing environment needs to be improved [11]. The instructing of colleges and universities always needs to be adjusted, especially in the instructing of advanced mathematics. Most colleges and

Figure 1: Smart city application scenarios.

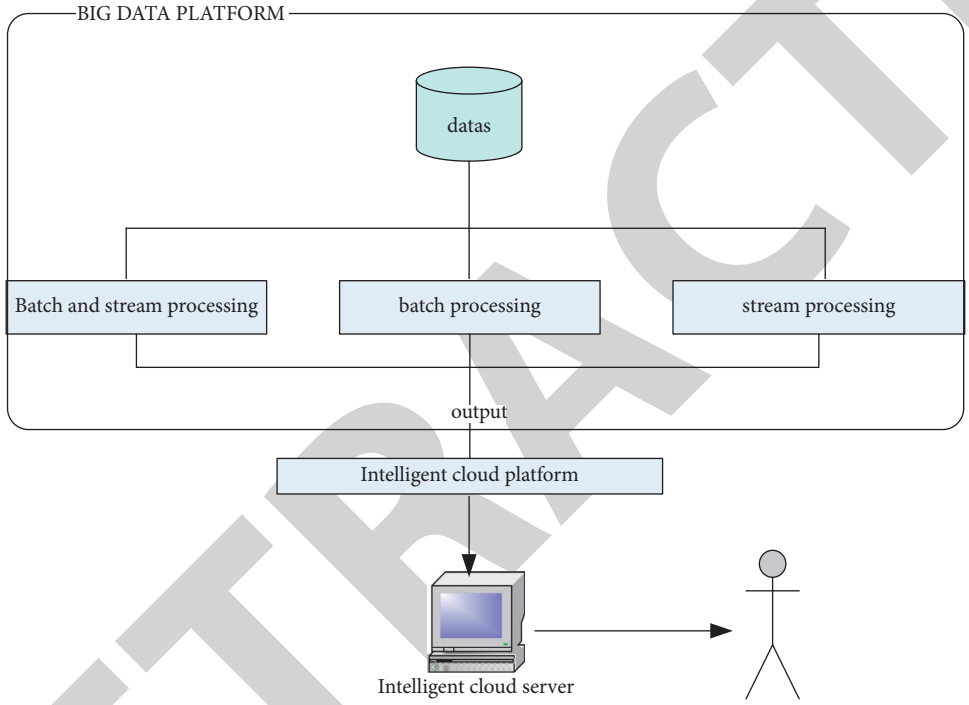

Figure 2: Data extraction flow chart.

universities advocate self-directed learning, so the courses arranged by schools will be much less than those in high schools, but advanced mathematics is a relatively difficult course to learn, and its less courses and more content make it more difficult for college students to study advanced mathematics to make it harder. Although colleges and universities have given more time for students to study independently, they have not fully considered the students' enthusiasm for the subject of advanced mathematics. The lack of class time also makes the teacher's explanation of the advanced mathematics textbooks not meticulous enough. The students have not achieved any instructing effect in the mist, and the students cannot understand, and the teacher and the students are not close to each other in the usual way. The study of advanced mathematics is becoming more and more lax.

Now that colleges and universities expand their enrollment in accordance with national policies, this will cause the overall quality of the student source to decline, and the lack of a solid foundation of the students themselves also brings great difficulties to the instructing work, so it is oblige to reform the teaching methods [12]. Because of the reduction in class hours, teachers will select content explanations in the textbooks in order to keep up with the teaching progress. The loss of the systematicness of teacher explanations leads to higher learning difficulties for students, particularly in terms of class hours. For subjects such as high mathematics, the reduction in class hours will make the teacher pass on some important concepts. In addition, the limited level of students will decrease the quality of teaching. The instructing method of the teacher still adopts the traditional way of explaining without new ideas, which is boring and boring. From the analysis of the important role of advanced mathematics, on the one hand, the instructing of advanced mathematics can exercise students' thinking style and improve students' innovative ability, but it is a very basic subject [13], so it needs to be consolidated the foundation.

Therefore, this article needs to establish a smart cloud platform to improve the relation between students and mentors, students' study tasty and zeal, to avoid the

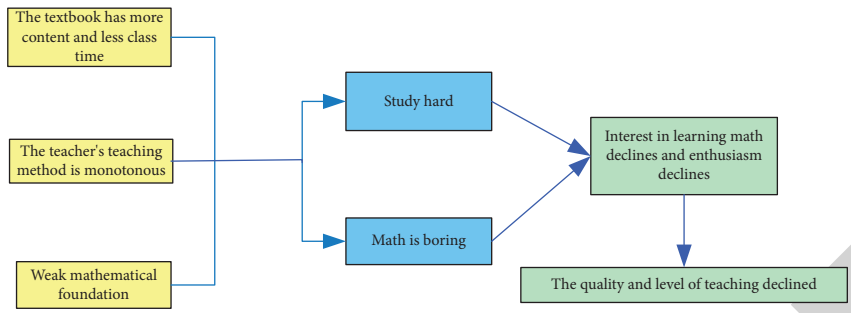

Figure 3: The impact of the existing instructing environment.

phenomenon shown in Figure 3, for the sake of achieving the instructing quality and the instructing level.

We can see the chain reaction of mathematics learning caused by the difficulty of textbooks, the monotony of teachers' teaching methods, and the weak mathematical foundation of students in Figure 3. Therefore, by establishing a smart cloud platform, instructors' instructing organization can be diversified. Students and instructors can communicate face-to-face in the form of flipped classrooms, and students can discuss problems in the classroom. If they do not understand, they can find instructors in time and solve the problem. In this way, instructors can explain to students who do not understand the content of the textbook, and truly improve the teaching quality and teaching level. In addition, they can also mobilize the enthusiasm of students to learn independently. We often say that hard work is addictive. When students learn knowledge in the discussion, they will have a sense of accomplishment, which will continuously encourage students to learn independently [14]. Of course, after the establishment of the smart cloud platform, teachers can check the students' learning situation in the background, and make sufficient preparations for the breeding of classroom explanations, so that the classroom has a higher quality and level. Therefore, the establishment of a smart cloud platform is of great significance to changing the mathematics instructing environment of higher vocational and technical schools.

2.3. Construction of Mathematics Instructing Environment of Higher Vocational Education Smart Cloud Platform Combined with DT

2.3.1. The Overall Architecture Design of the Platform. Using the advantages of DT technology, we establish a smart cloud mathematics instructing service platform that can be used by users anytime and anywhere, and can realize online course learning, intelligent evaluation, intelligent instructing, and other functions [15]. The platform is based on the three network layers of the Internet of Things as the system architecture foundation, combined with cloud computing and DT processing technology to build a layered architecture system. On the basis of cloud storage, data resources, and usage records, the data are processed and analyzed through DT processing components, and hidden letters are mined [16]. Then, its platform architecture is shown in Figure 4.

The mathematics environment architecture of the smart cloud platform includes a user layer, an application layer, a resource layer, and a basic layer. The user layer includes students, teachers, and back-end managers of the smart cloud platform. They can access the smart cloud platform through smartphones, computers, and tablets. Students can watch mathematics instructing videos on this platform, and they can repeatedly watch mathematics textbooks if they do not understand. Students with weaker foundations can also use this platform to conduct preclass previews and communicate with students online about learning difficulties and doubts. In addition, you can download more mathematics resources to facilitate learning and break the limitations of time and space [17]. This platform will automatically record the learning process of students and all aspects of learning data. Teachers, as class managers, can enter the backstage of the class through this platform. You can consult instructors anytime and anywhere, and instructors can see the questions on the message interface and answer questions. We obtain students' usual learning process and learning data, and use these data to adjust their own instructing methods. With the help of this platform, the enthusiasm and activity of students in the classroom can be improved. The platform realizes the diversified functions of content, innovates the online education service model, realizes the two-way balance between online services and learner needs, and creates a DT-driven intelligent mathematics cloud instructing platform [18].

Users cannot directly visit the resource layer, but can obtain learning resources through the basic layer. The process of obtaining resources is shown in Figure 5.

When users are looking for resources, DT and cloud service platforms internally select and integrate the resources that users need. As mentioned above, there are three ways to process data with DT. In the smart cloud platform based on DT, the corresponding selection process needs to be set. The installation principle of internal selection process is as below:

$$f_{(\text{choice})} = \frac{1}{1 + x^{-e_i}}, \quad (i > 0). \tag{7}$$

In (7), x is the resource that the user needs to find, e is the magnitude of data distributions in the database, and i is the magnitude of information distribution blocks that need to be retrieved in the database. This data information distribution block will perform label. This label is a smart label. When the user needs any learning resources, DT will choose the data information distribution block it stores. Then, it adopts the principle of system selection

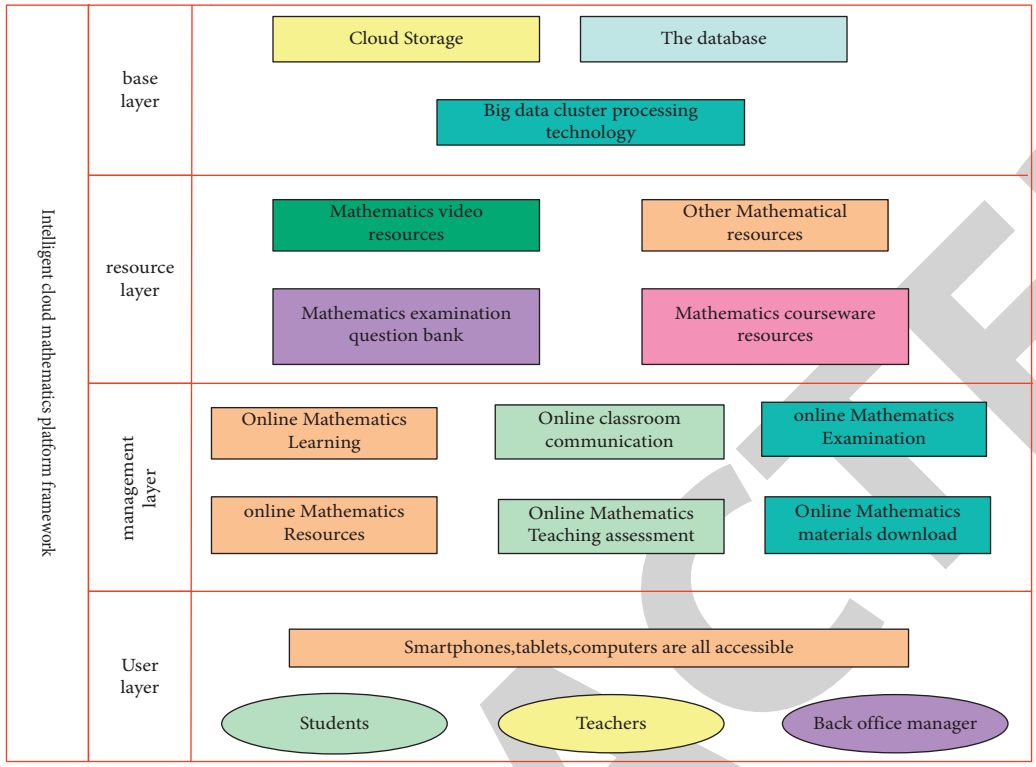

Figure 4: Framework diagram of smart cloud platform.

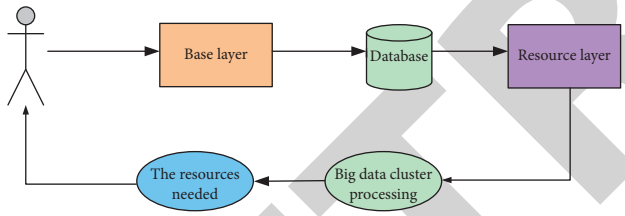

Figure 5: Flow chart of obtaining learning resources.

$$f_{(\text{demand})} = \frac{1}{1+x^{-e_i}} * \prod_i Y * \tau. \tag{8}$$

In the above formula, Y is the label of the information block where the resource is queried during the cluster processing of DT, where τ is a matrix that maintains the balance of information involved in the DT cluster processing technology

$$\tau = \begin{Bmatrix} x & e_i \\ Y & k \end{Bmatrix}. \tag{9}$$

In this way, the smart cloud platform will select the corresponding learning resources according to the needs of users. In addition, as an education platform, the smart cloud platform requires a total storage server in the background to store students' learning data and learning resources, and requires a communication network to connect different storage servers to gather learning resources from all over the world to the total cloud storage server among them [19]. There are many principles for resource aggregation. The aggregation of each submemory to the total memory is different. We assume that a submemory has M data information bases. If the total storage needs to mobilize the data information in this submemory, it is necessary to issue a command to the substorage server first, and the substorage service will only start to quickly analyze and operate internally according to the command. The principle is as follows:

$$w = \sum_s^t M_i\left(f_{(\text{demand})}\right) * \psi. \tag{10}$$

Among them, t is the network speed during command transmission, s is the time of command transmission, i is the weight generated during transmission, and ψ is the matrix generated during information analysis in the subserver

$$\psi = \{M \quad i \quad g\}. \tag{11}$$

When the subserver receives the command, it will begin to analyze and integrate the data. When it analyzes the data, it will split the data and then integrate it. The split principle is as follows:

$$\begin{aligned} E_1 &= \sum_s^t g * i_1 * \frac{1}{2} \coprod M, \\ E_2 &= E_1 + \sum_s^t g * i_2 * \frac{1}{3} \prod_i M, \\ E_3 &= \frac{E_1}{E_2} * \sum_s^t M * i_3 * \prod_i^t M. \end{aligned} \tag{12}$$

Among them, g is the threshold in the subserver, and E is the data flow in the subserver. In this case, it needs to

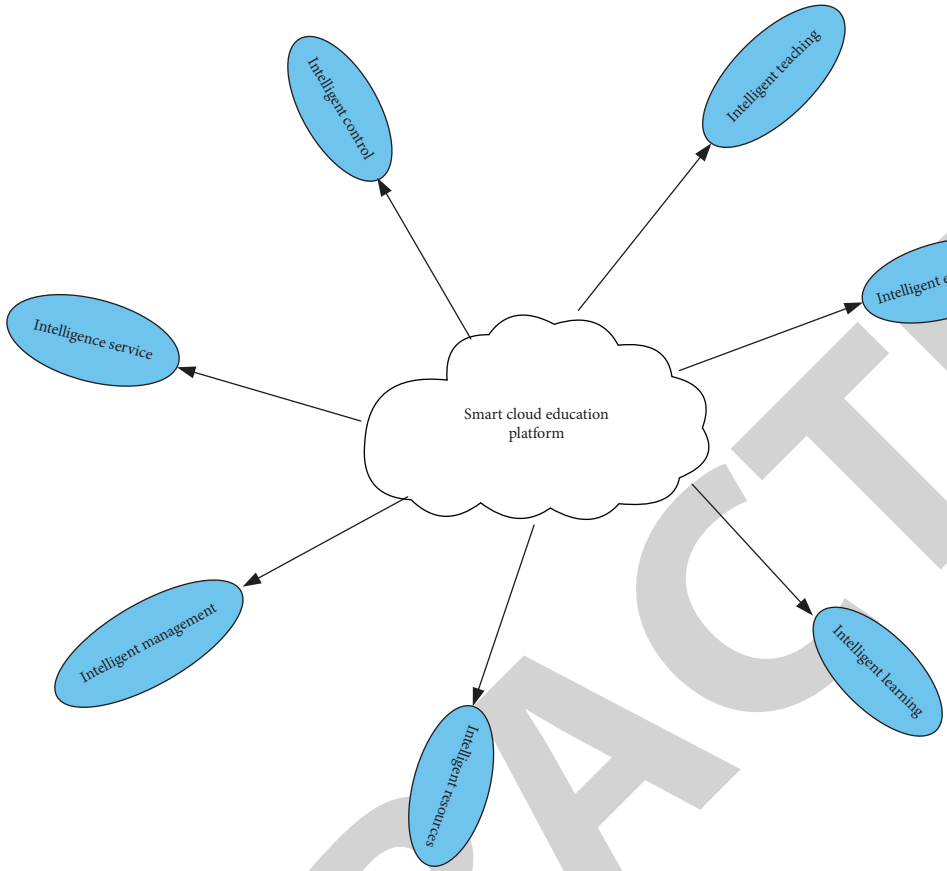

Figure 6: Functions of smart cloud platform.

calculate the data flow of the total server that it needs to input. The calculation principle is as follows:

$$E = (E_1 + E_2 + E_3) * \frac{\prod M}{4} * \varpi,$$
$$\varpi = \begin{Bmatrix} M & t \\ s & g \end{Bmatrix}. \tag{13}$$

In this way, users can accord their own needs and can also realize resource sharing through the smart cloud platform, which is facilitating students' learning and instructors' instructing.

2.3.2. Function Realization of Smart Cloud Platform. The functions shown in Figure 6 can be implemented in the smart cloud platform.

The smart cloud platform has the functions of smart management, smart resources, smart learning, smart evaluation, smart services, smart control, and smart teaching. Using this platform, the instructing environment of higher mathematics in higher vocational colleges will be improved, and at the same time, the quality and level of teaching can be improved. This platform can give feedback to instructors to achieve the function of supervising students' learning. In addition, this platform can intelligently record the student's daily learning time. Every time a student finishes a lesson with a high number of contents, and there will be test questions to help students consolidate their learning results and then calculate the student's learning efficiency based on the test scores and learning time [20], based on this analysis of students' learning attitudes toward this course, to provide support for further targeted guidance of students to effective learning.

For instructors, through this platform, students can be intelligently managed and taught, and they can also answer questions for students anytime and anywhere, communicate with students closely, shorten the distance between students, and improve based on the data of the smart cloud platform teaching methods make the classroom lively and interesting. The realization of different forms of instructing organization, such as smart cloud platform and flipped classroom organization, allows students to give full play to their active and subjective initiative, participate in mathematics classrooms, and improve their learning efficiency.

3. Mathematics Instructing Experiment and Analysis Based on DT Smart Cloud Platform

3.1. Survey of Students' Attitudes toward Teaching on Smart Cloud Platforms. This experiment will be carried out in freshmen, sophomores, and juniors in a higher vocational college. After three months of teaching on the wisdom cloud platform, the students' attitudes regarding the use of the wisdom cloud platform for mathematics instructing were investigated. The results are shown in Table 1.

Table 1: Bottom line results.

Attitude	Freshman	Sophomore	Junior	Total number
Support	2056	2790	2967	7813
Neutral	345	456	234	1035
Against	50	27	18	95
Total number	2451	3273	3219	8943

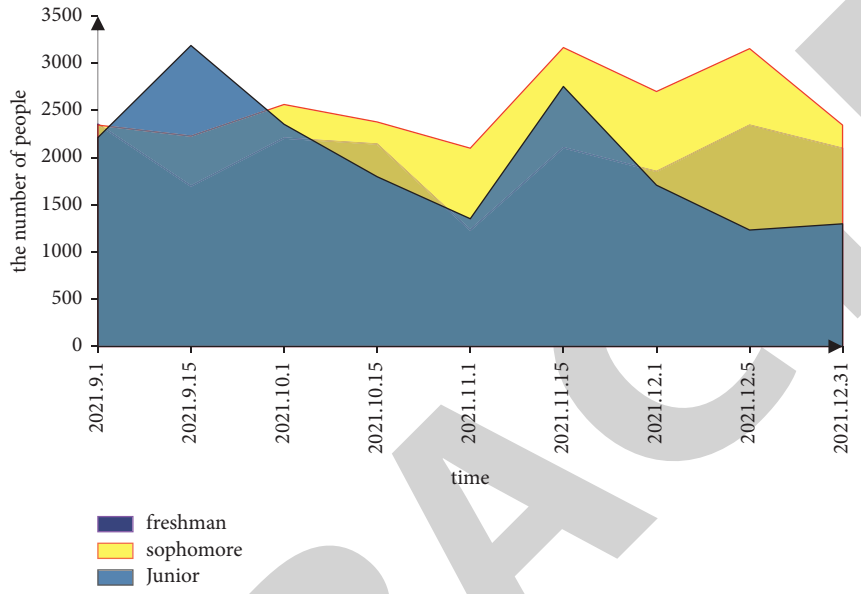

Figure 7: Usage of smart cloud platform.

There are more than 9,000 freshmen, sophomores, and juniors in the school, and 57 of them have not stated their position. Among the freshmen, most of them oppose it. Most of them said that instructing on the smart cloud platform would take up a lot of their extracurricular time. Most of the sophomores and juniors who opposed it said that they did not have enough time. After class, we squeeze time to study on the smart cloud platform. Most of the neutral students said that if the school requires them to accept it and do extracurricular learning on the platform, it does not matter if it is not required; most of the students who agree with the wisdom cloud platform teaching can help. They conduct preclass preparations and postclass consolidation exercises outside of class. At the same time, they can communicate with their classmates and instructors on the platform forum, and improve their high mathematics academic performance, so they are very willing to study independently on the smart cloud platform. And the use of the smart cloud platform in these three months is shown in Figure 7.

In Figure 7, it can be seen that the number of sophomore students using the smart cloud platform in the later period is more, while the third-year students use less and less frequently in the later period. After investigation, it is found that the junior students are due to time. Insufficiency has led to a reduction in the number of uses of smart cloud platforms.

3.2. The Teaching Effect Test of the Smart Cloud Platform. Regarding how to test the teaching effect of the smart cloud platform, we selected the first two classes of the university (the first and second classes, respectively) for nearly 3 months of mathematics teaching, and the first class combined with the smart cloud platform for mathematics teaching. The second class is taught according to the traditional teaching mode and compares the learning effects of classmates combined with the wisdom cloud platform.

3.2.1. Comparison of Class Teaching Effect. During these 3 months of teaching, the teaching progress of the two classes and the teaching instructors are the same. One of the class teachers combined with the wisdom cloud mathematics teaching platform for teaching, and the other class uses the traditional teaching mode. For example, as shown in Figure 8.

From Figure 8, the whole teaching level of class one is overtop than that of class two. Judging from the students' enthusiasm for learning high mathematics, the enthusiasm of students in class one is soaring, reaching 90%. But the second class is relatively low, only 70%, and the quality of teaching is also worrying. And in terms of student participation in the classroom, the entire class of the first class is participating in the classroom, but the situation in the second class is completely opposite. Only ordinary students were participated. It can be said that the teaching effect is quite bad. And in terms of grades, 80% of the excellent classmates are in the first class, and 40% of the classmates are in the second class. Therefore, it is obvious that the teaching mode combined with the wisdom cloud has greater

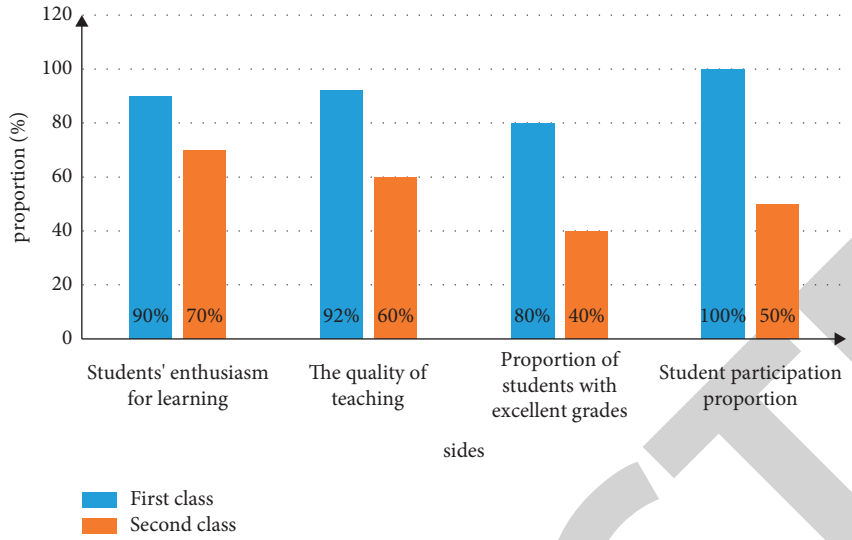

Figure 8: Comparison of all aspects of the two classes.

Table 2: Learning status of smart cloud platform.

Students	The learning time/h	Online test results	Online assessment	Offline test scores	Total grade
1	112.56	89	96	84	87.9
2	156.03	79	88	80	81.3
3	234.8	79	89	89	86
4	302.2	67	77	78	74.5
5	344.4	78	80	82	80.4
6	245.7	89	90	79	84.2
7	367.01	87	78	80	81.7
8	234	89	90	76	82.7
9	235.6	79	89	89	86
10	245.3	86	79	70	76.6

Note. Total score = online test ∗ 30% + online evaluation ∗ 20% + offline test ∗ 50%.

advantages, especially the teacher who teaches has greater feelings, and you can clearly feel the difference in the learning status of the two classes, and this teacher also highly praises and a teaching model that combines wisdom and cloud.

3.2.2. Comparison of the Learning Effect of Classmates Combined with Smart Cloud Platform Teaching. In order to understand the comparison of the teaching effect combined with the smart cloud platform, we selected ten students with different grades (excellent, good, and pass) from a class according to the proportion, and compared their learning effects on the smart cloud platform. This learning situation of ten students on the smart cloud platform is shown in Table 2.

The comparison between the results of these ten students and the final results of the previous semester is shown in Figure 9.

Combining Table 2 and Figure 9, the overall performance of these ten students has improved, especially for those who are in good grades and passing grades, and their grades have improved relatively quickly. The grades of the sixth and seventh students went directly from passing to the excellent stage. Of course, they are inseparable from his usual efforts on the wisdom cloud, with a total of 367.01 hours of online learning. Moreover, the application of the smart cloud platform to mathematics teaching has also promoted the change of the final assessment form, which can better reflect the real learning situation and level of students.

3.3. Summary of This Experiment. From the investigation of the college, it is found that most of the students support the mathematics teaching mode of the smart cloud platform, and most of the students will use the smart cloud platform for mathematics learning to improve. From the perspective of teaching effect, the teaching effect of the smart cloud platform is obvious, and it has more advantages than the traditional teaching mode. Using the smart cloud platform can fully mobilize students' sense of classroom participation and the enthusiasm of students to learn, and stimulate students' enthusiasm for high math learning and interest in learning, and it can intensify the communication between students and teachers, and solve difficult math problems in time to achieve good teaching results. Students can see their own learning process in the smart cloud platform, and can see their own progress, making their enthusiasm for high

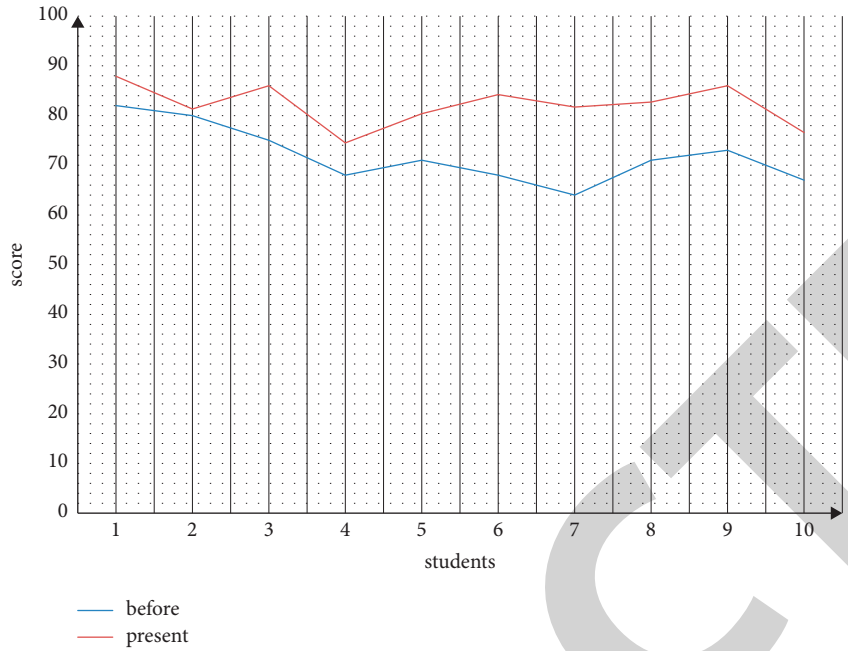

Figure 9: Comparison of the results of ten students and the final results of the previous semester.

mathematics even higher. In addition, the mathematics teaching on the wisdom Yunping platform has established a mathematics assessment form, and the assessment of performance is more comprehensive and intelligent, which can better reflect the mathematics level of the students, which is of great help to the improvement of the mathematics scores of the students.

4. Discussion

This article first discusses the smart cloud platform based on DT. The smart cloud platform is a smart cloud storage platform. With the addition of DT technology, the smart cloud platform can be upgraded. And the wisdom cloud platform is widely used, which affects all aspects of our lives, such as intelligent transportation and smart communities, which are manipulated by the wisdom cloud platform behind it. In the future, with the continuous upgrading of smart cloud platforms, the scope of its application will become wider and wider. For example, this article discusses the application of smart cloud platforms based on DT in the field of education. For the sake of improving the mathematics teaching environment of higher vocational colleges, this paper constructs a mathematics teaching environment based on the DT intelligent cloud platform to realize the teaching organization form that combines intelligent teaching with trauma teaching. The organization of math classrooms is more diverse.

The investigation and research of this article shows that mathematics teaching based on the DT smart cloud platform is accepted by most students and instructors, and has great promotion motivation. The online communication forum function in the smart cloud platform can not only achieve close communication between students but also close the connection between teachers and students; in addition, it can also live learning resources through the smart cloud platform and change the problem of uneven distribution of educational resources. Meanwhile, it is also convenient for students to study anytime and anywhere outside of class, which is large help to students' mathematics study; at the same time, it helps instructors understand each student's mathematics learning situation, and formulate corresponding teaching plans according to stimulate students' enthusiasm for advanced mathematics learning, and also innovated the final assessment format, making the results more in line with the students' level.

The experimental research in this article shows that the mathematics teaching environment of the smart cloud platform constructed in this article has greatly changed the traditional teaching environment. Through the smart cloud platform, you can know the students' extracurricular study of high mathematics in detail and improve the quality of teaching; in addition, students with weak foundations can make preclass preparations outside of class, keep up with the teaching progress of classroom instructors, and maintain their enthusiasm for learning. Experimental research shows that the smart cloud platform is of great help in improving students' academic performance and can be promoted and used in colleges and universities. However, there are still many subjects in colleges and universities where the teaching environment is like mathematics. This article only studies the wisdom cloud platform teaching of mathematics. Hopefully, the wisdom cloud platform can be used in the teaching of more subjects in the future.

5. Conclusions

This article discusses the existing mathematics teaching environment in colleges and universities, and found that there are big problems in the existing mathematics teaching

environment. For the sake of changing the teaching environment of colleges and universities, this paper builds a smart cloud platform based on DT for mathematics teaching. On this platform, mathematics learning resources can be shared, and students' extracurricular mathematics learning can be recorded so that instructors can change the instructing plan according to the students' learning situation, thereby improving the quality and level of instructing as a whole. In addition, this platform also implements an intelligent online test to detect students' learning conditions and consolidate students' learning achievements, and then intelligently evaluate students' learning conditions. This evaluation result will be recorded in the final assessment so that students can be guaranteed the enthusiasm for learning. Instructors can use the smart cloud platform to update the instructing organization and stimulate students' enthusiasm and enthusiasm for learning in the classroom. All in all, the smart cloud platform based on big data studied in this article has great practical significance.

Data Availability

No data were used to support this study.

Conflicts of Interest

The authors declared that there are no conflicts of interest regarding the publication of this article.

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