Application of Big Data in Entrepreneurship and Innovation Education for Higher Vocational Teaching

Long Chen, Hangzhou Polytechnic, China
Jiang He, Chengdu Normal University, China*

ABSTRACT

The traditional grid did not consider the dynamic characteristics of the big data of innovation and entrepreneurship education. The grid based quantitative evaluation model of analytical AI teaching information based on adaptive identification and weighting algorithm is gradually applied to the daily operating system of innovation and entrepreneurship education. This article studies the application of adaptive recognition weighting algorithm in grid analysis of innovation and entrepreneurship education in domestic vocational colleges, and proposes an AI teaching model of grid analysis based on adaptive recognition weighting algorithm and online analysis of innovation and entrepreneurship education intelligence in colleges and universities. The results show that the innovation and entrepreneurship education model in colleges and universities based on grid analysis network teaching and adaptive recognition weighting algorithm can efficiently and intelligently diagnose students’ teaching data, and achieve the innovation of big data analysis technology in colleges and universities.

KEYWORDS

Adaptive recognition weighting algorithm, Artificial intelligence teaching, Corporate social responsibility, Grid analysis, Innovative entrepreneurial education, Sustainable supply chain management

INTRODUCTION

Generally, big data is complex as well as extensive in quantity and distribution, making it necessary to adopt new technical methods to process data. Therefore, intelligent analysis technology is of great significance in data processing. Research on the applicability of big data analytics techniques to grid analytics internet teaching in China has increasingly become prominent in innovative and entrepreneurial education in higher educational institutions. As big data analytics technology has developed in China, the intelligent analytics methods for innovative entrepreneurial education in higher education institutions have gradually increased, posing new challenges to the rapidity and generality of intelligent grid analytics teaching methods (Liu, 2021). Therefore, solving the intelligent analysis
mode of innovative entrepreneurial education in professional colleges based on grid analysis has long been an essential research challenge in China (Liang et al., 2021). In this context, this paper studies the online grid teaching method for innovative entrepreneurial education in higher vocational institutions in the context of grid analysis. It proposes a grid innovation teaching model for entrepreneurship based on an adaptive identification weighting algorithm.

Entrepreneurship education aims to cultivate students’ entrepreneurial ability and innovative thinking. Compared with traditional discipline-based education, entrepreneurship education has particular characteristics and unique teaching methods. Firstly, entrepreneurship education focuses on interdisciplinary teaching content, covering a wide range of disciplines, such as business management, marketing, and finance. Secondly, entrepreneurship education emphasizes a practical orientation, helping students gain real-world entrepreneurial experiences and improve their practical operation ability through various training projects, business plan competitions, and other activities. In addition, entrepreneurship education also emphasizes cultivating students’ risk awareness and innovative thinking to cope with the challenges and uncertainties of entrepreneurship. Therefore, entrepreneurship education significantly enriches students’ comprehension, entrepreneurial spirit, and innovation ability. Through close integration with the entrepreneurial ecosystem, such education provides students with a broader development platform and practice opportunities. It promotes the development of an entrepreneurial culture, innovation, and entrepreneurial activities.

Innovation originates from entrepreneurship education, which can be understood as an “enterprising and pioneering skills education” and is regarded as “the third education passport.” Although innovation and entrepreneurship education cannot presently be regarded as an independent discipline, it has significant attributes of an independent discipline. In order to address the problems of low data reliability, weak result dimensions, and limited application in the existing senior higher education innovation and entrepreneurial education model, this research paper investigates the application of multiple assessment models based on an adaptive identification weighting algorithm to higher education institutions’ innovation and entrepreneurial education (Khaled et al., 2014; Vescio et al., 2008).

In contrast to the disadvantages of the current mainstream multivariate evaluation and optimization analysis models that require pre-processing of specific data, the innovation of this paper is its use of an adaptive recognition weighting algorithm that combines the quantitative evaluation of entrepreneurial innovation in artificial intelligence and image recognition technology. The model is used to construct an online innovative entrepreneurial education method for higher education institutions. On this basis, the model can not only record and store the innovative and entrepreneurial education data of students in different vocational academies but also fully utilize the complementary nature of each individual in innovative and entrepreneurial education. It uses a secondary audit to achieve the intelligent classification of an innovative entrepreneurial education. On the other hand, using quantitative indicators to prioritize an innovative entrepreneurial education can effectively customize the factors affecting such an education, reduce evaluation errors, and improve its intrinsic stability and data reliability.

RELATED WORK

The purpose of studying innovation and entrepreneurship education among college students in the intelligent era is to understand the meaning of innovation and entrepreneurship and ensure that students can fully integrate with their majors and the national economic innovation and entrepreneurship environment after participating in such an education. In addition, considering the feasibility of the model, it can be improved based on the current innovation and entrepreneurship education model, deeply optimized from multiple dimensions, and run through new educational concepts and teaching methods to fundamentally improve the effect of innovation and entrepreneurship teaching. As of March 2022, many domestic and foreign scholars had conducted studies of the intelligent instructional
mode of innovative entrepreneurial education in colleges and universities from various aspects, obtaining a range of results (González-Serrano et al., 2020). Lv. M et al. (2022) found that in the course of colleges and universities carrying out teaching and research activities, internet computer management must be based on the principle of openness to facilitate college or university reform and development. However, precisely because of the openness of the university network, university teachers and students are the most active user groups in the online world. When they browse external websites and information, the likelihood of attacks by external networks increases, as is often the case in innovation and entrepreneurship education. Washington et al. (2020) found that the mainstream intelligent analysis systems for innovative entrepreneurial education in foreign universities have not yet reached a sophisticated technological stage and are more often designed for specific problems or perspectives. Hevner and Gregor (2022) found that some innovative entrepreneurial education funds, such as those from funding companies with a scale of over one trillion yuan, inherent technological capabilities and characteristics within companies, particularly those with a scale of over one trillion yuan in funding. It suggests that these companies possess innate technological elements and capabilities, such as concurrent computing, customer portrait drawing, user habit analysis, and smart asset allocation. In other words, these companies are naturally endowed with strengths and traits in these technological areas.

This companies’ technical reserves and practical experience have reached the forefront of the industry, making it necessary to develop innovative entrepreneurial education in higher vocational institutions. O’Hanlon et al. (2021) found that although various investment and financing institutions have different future business models and development directions of asset management subsidiaries, artificial intelligence technology is already being used as a significant tool to improve the overall effectiveness and quality of the asset management business related to innovation and entrepreneurship. It has achieved broad consensus in the industry. Kim et al. (2020) found that in debt-side education courses in the area of innovative and entrepreneurial education, the most commonly used education method in China involves a relatively strict process that restricts the learning behavior of different groups of higher vocational students so that it can only be carried out on the internet or APP—an adaptive value method based on the analysis strategy of varying degrees of freedom in different dimensions. Mao and Zhang (2021) analyzed innovative entrepreneurial education in tertiary vocational institutions from the perspective of its convenience. Since these studies at home and abroad have compelling concrete problems to solve, they do not possess the ability to analyze innovative entrepreneurial education in tertiary vocational institutions intelligently. They are normative, making it difficult to achieve a high-value AI-based analysis strategy. Roomi et al. (2021) combined big data analysis technology, principal component analysis, and related theories to create a set of different types of entrepreneurial innovation education systems and multi-dimensional strategies. They proposed a higher vocational education system with adaptive analysis methods. Baran and Berkowicz (2021) proposed a brand-new intelligent evaluation solution based on theoretical relationship analysis theory in innovative entrepreneurial education in tertiary vocational institutions. They found that different types of databases have reliability characteristics of different dimensions. Schuelke-Leech (2020) proposed an innovative entrepreneurial education model based on the differences between various innovative entrepreneurship courses and a statistical analysis of students’ personalities in tertiary institutions. The internal relevance of this type of dataset can be evaluated.

Based on the above domestic and international-level research, most of the current mainstream evaluation analysis models (intelligent analysis algorithms primarily composed of big data analysis technology-based or discrete classification strategy algorithms) in innovative entrepreneurial education evaluation research need to set different rules to achieve adaptive analysis and multi-dimensional changes for various courses (Guo et al., 2022; Matzembacher et al., 2020). In the assessment and optimization of innovative entrepreneurial education, on the other hand, most intelligent analytical models require matching analysis and customizing discussions for different types of innovative entrepreneurial educational programs (Kitsios et al., 2021; Liu & Lin, 2021). Hence, it is crucial
to investigate the grid-based teaching method of physical education in higher education institutions based on an adaptive recognition weighting algorithm and grid analysis.

Bhide (1994) maintained that a difference exists between entrepreneurs and non-entrepreneurs and summarizes the qualities possessed by the former. Gartner (1985) argued that entrepreneurial activity consists of four elements—entrepreneur, organization, environment, and entrepreneurial process—each containing multiple sub-elements that constantly interact and influence each other. Shane (2000) proposed that entrepreneurship is a process in which a person employs various means to identify, evaluate, and develop entrepreneurial opportunities and to manufacture goods and services, proposing a new theory of entrepreneurial management flow.

For the study of entrepreneurs, Kayne (1999) argued that entrepreneurship policy mainly works in the early stages of business creation and development, including entrepreneurship, taxation, access to finance, entrepreneurship education, and intellectual capital. Lunderstrom and Stevenson (2001) suggested that the essence of entrepreneurship policy is to stimulate entrepreneurship and that it should thus encompass aspects of financing, education, and the environment. Collins (2003) proposed that policy supporting student innovation and entrepreneurship should involve support and encouragement by the management at all levels for innovative entrepreneurs in the early stages of development. Finally, Hart (2003) argued that the most critical role of entrepreneurship policy is to reduce the risk of startups to promote better startup growth (Hart, 2003).

Regarding research on entrepreneurship education, Hytti and O’Gorman (2004) suggest that different teaching methods are adopted according to specific teaching objectives to enhance entrepreneurial awareness, which is best done through broadcasting, training, or lectures. Moreover, to enhance entrepreneurial skills, students should be involved in entrepreneurial practice for education and training (Hytti & O’Gorman, 2004). Lonappan and Devaraj (2013) summarized the teaching methods of entrepreneurship education, including case studies, group discussions, individual presentations, and individual reports.

**Methodology**

**Application Principle of Adaptive Recognition Weighting Algorithm in Intelligent Analytics of Innovative Entrepreneurial Training in Institutions of Higher Education**

Self-adaptive refers to automatically adjusting the processing method, processing sequence, processing parameters, boundary conditions, or approximate conditions according to the data characteristics of the processed data in processing and analysis to adapt them to the statistical distribution characteristics and structure characteristics of the processed data, to achieve the best processing effect (Liang et al., 2021; Yu & Wang, 2021). The adaptive identification weighting algorithm intelligently analyzes and matches different types of data. The adaptive identification weighting algorithm (AIWA) is a machine learning algorithm capable of recognizing and modeling complex systems, especially those with nonlinear or time-varying dynamics, for which traditional modeling methods may be insufficient. By classifying and operating different types of data and analyzing different value degrees, different types of databases are obtained for analysis and disturbance, and the efficiency and classification of their internal data are realized (Khairullina et al., 2015; Santos et al., 2021). This strategy analyzes the relationship between different modules of traditional entrepreneurship education and establishes an adaptive recognition weighting model. Using an adaptive recognition weighting model to examine the relationship between different entrepreneurship education modules is aimed at understanding how each module contributes to the program’s overall effectiveness. A comprehensive evaluation is conducted regarding the choice of teaching format, content classification, and students’ learning ability, thereby improving their intrinsic innovative and entrepreneurial qualities (Jiang, 2022; Tok, 2020).

Entrepreneurship development strategies based on comprehensive evaluation aim to improve individuals’ or organizations’ intrinsic innovative and entrepreneurial qualities. These strategies
involve several approaches, including providing training and education programs to develop entrepreneurial skills, facilitating networking and collaboration opportunities, offering funding and financial support, creating regulatory and policy initiatives that support entrepreneurship, and conducting regular evaluations and providing feedback. On this basis, this paper optimizes the teaching strategy of innovative entrepreneurial education in professional colleges by using the idea of an adaptive identification and weighting algorithm. It proposes a thinking construction method of innovative entrepreneurial education based on big data technology. The thinking construction method is an approach to problem-solving that entails breaking complex problems down into smaller, more manageable components and thoroughly analyzing every component. This method aims to assist individuals in developing a more systematic and structured approach to problem-solving, which can lead to more effective solutions. Figure 1 shows the standard ideas of the adaptive identification weighting algorithm in the application analysis of innovative entrepreneurial education in professional colleges.

The Construction Process of Grid Analysis Based on Adaptive Identification Weighting Algorithm in the Analysis Model of Innovative Entrepreneurial Education in Professional Colleges

Information content has its own internal structure and fixed components, which require particular appreciation to uncover the mutual continuity of various parts. A grid provides a basic design framework, helps form clear and coherent information relationships and understandable pages, and gives the design internal cohesion. In constructing the intelligent analysis model of innovative entrepreneurial education in professional colleges based on the adaptive identification weighting algorithm, standards must be developed for establishing grid analysis and related parameters. The adaptive identification and weighting algorithm allows machine learning models to adapt to changing conditions by assigning weights to various data components. The recognition weighting algorithm will be adaptive due to the amount of data, so its inherent relevance is crucial. The innovative entrepreneurial education model of higher professional colleges is based on self-adaptive identification, and the weighted algorithm is based on continuous correction of data for self-learning and building grid analysis network instruction. The weighted algorithm with continuous data correction can

Figure 1. Common ideas in the application analysis of self-adaptive identification weighting algorithm in innovative entrepreneurial education in higher professional colleges
significantly improve the accuracy and performance of self-learning and building grid analysis networks. The algorithm can help ensure that the network remains up-to-date and accurate even as new data is introduced by allowing it to adapt and learn from the data it receives. The data processing and analysis process of the classification node based on the adaptive identification weighting algorithm is displayed in Figure 2.

Though big data and AI have distinct concerns, they are intimately related. On the one hand, AI needs a large amount of data as the basis for training, and on the other hand, big data needs AI techniques for data processing. A common form of data analysis is value-based manipulation, such as machine-based learning. Of the two primary expressions of big data value, one of the primary avenues for data adoption involves agents (artificial intelligence products). Usually, a significant amount of data is needed for “training” and “verification” to guarantee operational reliability and stability. The typical adaptive identification weighting algorithm of the grid analysis network for teaching construction and realization process characteristics is based on the difference analysis of innovative entrepreneurial education in colleges and universities based on a particular aspect by identifying and judging evaluation modules of innovative entrepreneurial education needs of colleges and universities and the extent to which innovative entrepreneurial education needs are consistent with the grid. Therefore, although many universities are equipped with multi-media classrooms, specific problems persist. For example, technicians are unaware of the misguidance of innovative and entrepreneurial teachers in the adaptive analysis of different students, resulting in different types of databases with different characteristics. Therefore, for the innovative entrepreneurial education model of higher education institutions based on the grid-based analysis of online teaching, firstly, we use the relevant big data and intelligent processing to obtain the required data under the adaptive identification weighting algorithm. The specific range of values required for the universality of innovative entrepreneurial education in higher professional colleges and universities is combined with adaptive identification weighting algorithms to find specific targets in the data to be processed, eventually obtaining the optimal solution search and then filtering the data to analyze the universality of online innovative and entrepreneurial educational model for students in vocational colleges and universities. To identify specific groups of students who may be underserved by current online educational offerings, one common method uses a combination of demographic and geographic filters.

In addition, the self-adaptive identification weighting algorithm will also perform multiple training and discrimination processes on different innovative entrepreneurial education data according

Figure 2. Data processing and analysis process of classifying nodes based on adaptive identification weighting algorithm
to a certain probability, which can achieve batch processing of modular data with a relatively large
degree of correlation. This is performed multiple times. Combining multiple training processes and
the self-adaptive identification weighting algorithm can contribute to developing a more efficient
and effective training process that adapts to changing circumstances and improves over time. Data on
innovative entrepreneurial education refers to information gathered and analyzed about educational
programmers and initiatives that aim to instill entrepreneurial mindset and skills in students. After
reaching error discrimination, we finally achieve precise intelligent analysis and quantitative processing
of innovative entrepreneurial education in professional colleges. Intelligent analysis has effectively
achieved error discrimination across diverse industries such as healthcare, finance, and manufacturing.

This grid analysis, implemented based on adaptive identification and weighting algorithms, uses
a self-study model of innovative entrepreneurial education in higher vocational institutions. The
threshold value of each processing cell is set to simulate the characteristics of the antenna propagation
network of an ant colony. Some of the main features of an ant colony’s antenna propagation network
include its robustness, decentralization, flexibility, and efficiency. The network can withstand external
disruptions and adapt to changing circumstances while maintaining efficient and accurate
communication. The first-order function of its associated function $Z'(x)$ is:

$$Z'(x) = \frac{e^{-x}}{1 + e^{-x}} + e$$

(1)

Among them, $x$ is the teaching data to be tested for grid analysis.

The target data of the initial cohort to be assessed are naturalized, and the normalized equation $B(x)$ is:

$$B(x) = \frac{\sum_{i=0}^{k} \beta_{i} Z(x)}{Z(x-1)}$$

(2)

where $\beta_{i}$ is the processed value. The input level data is imported into the hermit layer first node
of the ant colony for operation, and the model equation is:

$$C(x) = \lambda^{2}x$$

(3)

where $\lambda$ is a composite number. This equation is also known as the validation of the equations
of the model, and its true resolution is:

$$C'(x) = e^{\lambda(x-a)}$$

(4)

A stochastic probability model and an adaptive recognition weighting algorithm are used to
solve the problem. A stochastic probability model is a type of statistical model that incorporates
randomness or uncertainty into the estimation of probabilities. For various real problems, the outcome
can be represented as:
$$\sum_{i=0}^{k-1} (x + \lambda \beta_i) x_{n+i} - \sum_{i=0}^{k-1} \frac{(x + \beta_i)}{\beta_i} x_n = 1$$  \hspace{1cm} (5)$$

where $\beta_k$ is the processed value, and $k$ is the extreme value function. After importing the input layer data into the first degree of freedom point for operation, if the solution is:

$$D_n = \sqrt[n]{r^n + (r-1)^n}$$  \hspace{1cm} (6)$$

then there are:

$$D_n x \leq 1$$  \hspace{1cm} (7)$$

Its equivalent form is:

$$C'(x) \leq C'(x-1)$$  \hspace{1cm} (8)$$

A stochastic probability model and an adaptive recognition weighting algorithm are used to solve the problem, and for various practical problems, the results can be expressed as:

$$E(x) = \frac{\sqrt{x^r}}{\sqrt[k]{\sum_{i=0}^{k-1} \beta_i x^r}}$$  \hspace{1cm} (9)$$

Using the above equation as the limiting characteristic error degree for solving the probability distribution model, the roots of the stable polynomial need to satisfy:

$$\left| E(x) \right| < 1, x = 1, 2, \ldots, k$$  \hspace{1cm} (10)$$

**Grid Analysis Network Teaching Process of Physical Education Courses in Higher Vocational Colleges Under the Self-Adaptive Identification Weighting Algorithm**

The corrective error of each concealed layer processing unit is created by the joint action of the corrective errors transmitted by the various export chain processing units. The various stages involved in exporting goods from one country to another are referred to as export chain processing units. The process includes sourcing, production, packaging, transportation, customs clearance, shipping, warehousing, and distribution. In addition, we need to perform initial processing on the computer program under the adaptive recognition weighting algorithm and complete high-intensity data operations according to different types of data sets. High-intensity data operations are completed with a variety of datasets for a variety of purposes. Large datasets are commonly used in scientific research to analyze and model complex phenomena, such as climate change, genetic sequences, and particle physics.
First, the initial value problem in innovative entrepreneurial education in higher professional colleges can be solved by the following formula:

\[ E(x) = \frac{E(x-1) + E(x+2)}{2} \]  
(11)

Simplifying and distributing the above formula, the following formula can be obtained:

\[ E'(x) = \frac{E'(x-1) + E'(x+2)}{2 \times 2} \]  
(12)

Simplifying again, we have:

\[ E''(x) = \frac{E''(x-1) + E''(x+2)}{2 \times 2 \times 2} \]  
(13)

At this stage, the simulation results of the corresponding evaluation scores in the process of multiple loop discrimination in the grid analysis for three sets of data (three different sets of innovative entrepreneurial education data) in the adaptive identification weighting algorithm are shown in Figure 3.

The study combines the random collection of big data and numerical characterization based on adaptive recognition weighting and particle swarm algorithms. By simulating the calculation process of “intelligent classification of data sources” and through high-intensity analysis of different types of data groups, it is possible to construct the classification basis of data sets based on adaptive allocation and digital feature analysis rules. The validity of the approach was measured by stochastic modeling of three sets of data (three different sets of data on innovative entrepreneurial education in higher professional colleges). The accuracy of an approach’s predictions, when applied to different data sets, can be used to assess its validity. This is typically accomplished in stochastic modeling by analyzing the model’s results on multiple datasets and comparing them to the actual data. The results are displayed in Figure 4.

After using the grid analysis strategy analysis based on the adaptive identification weighting algorithm, after adding the value analysis of the degrees of freedom of different types of higher vocational colleges, the statistical results of the simulation analysis of different types of artificial intelligence innovation and entrepreneurship teaching platforms are shown in Figure 5 shown.

The simulation results in Figure 3, Figure 4 and Figure 5 indicate that the strategy developed under the adaptive identification weighting algorithm strategy, together with the existing features of higher education institutions, can effectively improve college students’ comprehension in the collection and analysis of large amount of innovative and entrepreneurial data, as well as the efficiency of collaboration. Moreover, it can effectively solve the computational complexity of different data variables and their digital characteristics in the intelligent analysis process of innovative entrepreneurial education in higher professional colleges. Therefore, the two-dimensional roundness classification algorithm is used in this link, giving us the following:

\[ R\left(\frac{x_n}{x}\right) = \frac{R(x_{n+1}) - R(x_{n-1})}{x} \]  
(14)
After inverse discrimination, we get

\[
\frac{R(x_{n+1}) + R(x_{n-1})}{2n} = \int C(x, e(x))
\]

Among them, \( C(x, e(x)) \) is the high-value change analysis function.

**ANALYSIS AND DISCUSSION OF RESULTS**

**Experiment Verification Process of Intelligent Analysis of Innovative Entrepreneurial Education in Higher Professional Colleges Based on Grid Analysis**

After classifying different innovative entrepreneurial education platforms, according to the self-adaptive identification weighting algorithm and the innovative entrepreneurial education classification model based on grid analysis and intelligent analysis, the experimental data were compared and analyzed, and a confirmatory experimental design was carried out. Grid analysis and intelligent analysis are two different techniques used in decision-making processes. Grid analysis is a structured approach that involves creating a grid or matrix to evaluate different options or choices based on predefined criteria. Intelligent analysis is a more flexible and qualitative approach to extracting insights from large datasets using advanced techniques and algorithms. The research presented in this paper
takes the data to be evaluated and the data that have been evaluated as the test object. Under the grid analysis strategy based on the adaptive identification weighting algorithm, the existing innovative entrepreneurial education courses of four groups of different types of students in higher vocational colleges are used to carry out the research. An analysis output image of the experimental result data is shown in Figure 6.

As seen in Figure 6, after specific experimental tests are carried out on three different types of innovative entrepreneurial education experimental data, the corresponding intelligent matching degree evaluation index results show strong regularity (gradually increasing). This indicates that in cyclically judging the next set of data information, the adaptive algorithm needs to analyze its internal correlation and then realize an intelligently predictable evaluation mode based on the artificial intelligence method to evaluate different types of higher vocational colleges and students’ value degree analysis free matching and weight distribution.

**Analysis of Experimental Results**

By comprehensive matching diagnosis of the existing information databases of innovative entrepreneurial education in higher education institutions, we can see that although the differences between various types of databases in the process of experiment are substantial, the corresponding regular changes are still very close to each other. The results of the error diagnosis are presented in Figure 7.

The results in Figure 6 and Figure 7 show that the stability and error of the experimental results are small, and they have improved in different types of innovations. This is because the adaptive
analysis matching tracking adopted in this study is in the process of quantitatively characterizing different artificial intelligence teaching methods, the inherent correlation of the algorithm can be discovered and mined by the artificial intelligence system, and high-precision classification of data can be achieved according to the correlation between different data. Therefore, the results of the experiments show that the grid analysis methodology based on the adaptive identification weighting algorithm presented in this study can significantly enhance the performance of different types of higher education institutions in applying the intelligent analysis model for innovative entrepreneurial education. Therefore, students’ high-intensity analysis and matching tracking of intrinsic relevance are significantly innovative. By making full use of the advantages of an intelligent environment and using data services and support to help college students achieve innovation and entrepreneurship, education researchers at all levels must continue to deepen reform, solve the problems existing in the previous college students’ innovation and entrepreneurship education, and constantly improve the innovation and entrepreneurship education model. As a result, college students’ innovation and entrepreneurship education can be practical, improving teaching effectiveness and promoting entrepreneurship education in China.
Figure 6. Analysis image of experimental results with corporate social responsibility

Figure 7. Error analysis of experimental results with corporate social responsibility
CONCLUSION

This paper first reviewed the status of research and problems in the digital application of innovative entrepreneurial education in higher vocational institutions in China. It then suggested a weighting algorithm based on adaptive identification in the context of big data. Finally, the educational effect of the model in the innovative entrepreneurial educational process in higher vocational colleges was tested through experiments. The experimental results show that in the innovative entrepreneurial educational model in higher vocational institutions, the adaptive recognition weighting algorithm can quickly determine the demand focus of different creative entrepreneurial education courses. After comparing and analyzing the software of innovative entrepreneurial education objectives of two different needs in higher education institutions, we found that its reliability in innovative entrepreneurial intelligent teaching is greatly improved in different types of intelligent analysis models. The advantages of identifying the degree of optimization of innovative entrepreneurial education in higher education institutions and the standard knowledge of innovative entrepreneurial education in higher education institutions are apparent. However, the intelligent analysis model has not considered the effects of other distinct factors, so it should be studied in depth for accuracy errors.

DATA AVAILABILITY

The figures used to support the findings of this study are included in the article.

COMPETING INTERESTS

The authors declare there are no competing interests.

FUNDING

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors. Funding for this research was covered by the authors of the article.

ACKNOWLEDGMENTS

The authors would like to sincerely thank those whose techniques have contributed to this research.
REFERENCES


