Retraction

Retraction: Under the Background of Big Data, Information-Based Teaching has Great Influence on the Development of College Students’ Employability (J. Phys.: Conf. Ser. 1852 042096)

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This article has been retracted by IOP Publishing following an allegation that raises concerns this article may have been created, manipulated, and/or sold by a commercial entity. In addition, IOP Publishing has seen no evidence that reliable peer review was conducted on this article, despite the clear standards expected of and communicated to conference organisers.

The authors of the article have been given opportunity to present evidence that they were the original and genuine creators of the work, however at the time of publication of this notice, IOP Publishing has not received any response. IOP Publishing has analysed the article and agrees there are enough indicators to cause serious doubts over the legitimacy of the work and agree this article should be retracted. The authors are encouraged to contact IOP Publishing Limited if they have any comments on this retraction.

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Under the Background of Big Data, Information-Based Teaching has Great Influence on the Development of College Students' Employability

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Abstract. College students are an important human resource and an important driving force for China's social and economic development. With the continuous expansion of the scale of college enrollment nationwide, college education has changed from "elite" to "mass", and the employment mode of college students has changed, and they are also facing the change of employment management functions. How to better guide and help graduates to find jobs is an urgent problem to be solved. This paper mainly studies the influence of information-based teaching on the development of college students' employability under the background of big data. Through questionnaire survey, this paper has collected various data of fresh college graduates from different educational levels and professional backgrounds and conducted data processing and data analysis. The experimental results show that in the study on the impact of information education on college students' employability, 24.1% of the variance can be explained, and the independent variable ACTS on college students' employability and is not affected by the controlled variable. The regression coefficients of information education were 0.213 and 0.209 respectively, both reaching the significance level. Information education has a significant positive effect on college students' employability.

Keywords: Big Data, Information-Based Teaching, Employment of College Students, Reliability Analysis

1. Introduction
At present, the employment situation of graduate students in universities and colleges in China is increasingly severe. On the one hand, the leapfrog development of higher education in China makes the number of graduate students in universities and colleges increase day by day, which leads to the increasing scale of graduates and the saturation of the employment market. On the other hand, the society needs the talent level unceasing change, the university graduate student's lack of employment ability and so on are also causes their employment difficulty important factor. Therefore, improving the employability of graduate students in colleges and universities, cultivating their comprehensive quality, and helping graduate students find jobs smoothly have become one of the important tasks facing higher education and one of the key social problems that need to be solved urgently [1]. In order to improve the employability of college students, under the background of big data, various colleges and universities in China have introduced information-based teaching means one after another...
to enhance students' learning interest through the integration of traditional classroom and existing information-based teaching methods, thus promoting the development of college students' employability.

At present, the classroom teaching based on the information environment is undergoing unprecedented change, with the development of the society and the progress of science and technology, teachers should update teaching content, comply with the demand of students' personalized learning and development, the transformation of the mode of talent training and cultivate the students' life concept, scientific thinking, scientific inquiry, and social responsibility, namely the subject core literacy [2-3]. For this reason, it is necessary for teachers to take into account every student and find out the learning problems of each lesson, so that students can get good development in time. However, this has higher requirements on teachers' professional quality, and teachers should have core quality.

In the era of big data, traditional education is transiting to wisdom education, and education big data surrounds teachers. The ability of applied data teaching is an extension of teachers' professional quality under the background of big data, which can effectively help teachers cultivate students' core quality.

This paper collects the information of fresh college graduates from different regions and majors in the form of questionnaire survey. Through data analysis and processing, this paper studies the influence of the employability and professional skills of many college students in information-based teaching under the background of big data.

2. Influence of Information-Based Teaching on College Students' Employability

2.1. Concept and Category of College Students' Employment Work

(1) Connotation and Development of College Students' Employment Work
With the popularization of higher education in China, great changes have taken place in the employment requirements of college students. At present, China's college student employment system and the socialist market economic system, market-oriented, local governments at all levels and colleges and universities overall coordination, graduates and employers two-way choice. The role of colleges and universities in the employment of college students has also undergone significant changes, from the past "management" to the current "service". We should provide more professional employment guidance for college students, actively expand employment channels and provide effective online employment services. The functions of universities in the employment of college students are mainly reflected in the following aspects [4]:

1) Guide career planning;
2) Implementing entrepreneurship education;
3) Provide employment guidance;
4) Expand employment channels;
5) Overlapped employment platform.

(2) Category Change of College Students' Employment Work
With the establishment of the socialist market economy system, college graduates distribution system reform, the function of talent market gradually improve, fundamental changes have taken place in college graduates employment way, by the national "uniform distribution" gradually to the supply and demand, two-way choice, under the guidance of the national employment policy, policy, and work independently. For colleges and universities, the scope of their employment work must be changed. The state has put forward employment requirements to promote the realization of higher quality, which points out the direction for the transformation of employment functions of college graduates. The focus of employment should be shifted from administrative allocation to service functions, so as to educate, guide and help graduates find better jobs [5].

2.2. Informatization Teaching under the Background of Big Data
Information-based teaching is the development trend of future teaching. Informationization has gradually penetrated into every aspect of life, and People's Daily life and daily life have gradually been inseparable from the development of informationization, so is teaching. Information-based teaching has experienced the historical development of teaching reform and accords with the forward step of teaching practice. Information teaching does not depend on the amount of information, the complexity of course knowledge or the diversification of teaching methods. It lies in how to connect informationized data with teaching; How to extract effective educational data through data analysis technology; How to display effective educational data through scientific means [6-7]. By grasping the timeliness of the teaching content, big data technology is used to capture the teaching content that follows the pace of The Times. By grasping the pertinence of teaching methods and using big data analysis technology, the teaching content is taught in accordance with the comprehensive development of students. Through grasping the implementation of teaching evaluation, using the function of big data storage, recording the process of education and teaching evaluation, the scientific teaching evaluation can be achieved. In the era of big data, we should focus on innovative teaching and learning and deepen the reform of college curriculum teaching. Through the integration and sharing of education data, big data cooperation among government, enterprises and schools can be realized [8]. Integrate big data technology into the education process. To realize the innovation of teaching thinking with data consciousness and the use of data analysis technology to optimize the personalized, diversified and multi-layered teaching mode. To realize the combination of in-class and after-class evaluation, online teaching management and offline teaching guidance.

(1) Effective Expression of Big Data Technology Assistant Teaching Information

The rain in classroom. In some colleges and universities, some teachers have mastered the methods and applied them in classroom teaching. In the course process, real-time danmu interaction is further promoted between teachers and students. At the same time, the teaching process of the course is recorded with the mark of relevant data. It can preserve the whole teaching process and help to realize the course evaluation in teaching.

The classroom. In the course teaching process, the teacher may use classroom. When playing PPT to explain knowledge points, you can insert knowledge points and hot topics related to the class at any time. Through the discussion between theory and practice, stimulate students' interest in classroom learning.

Wisdom class. Apply big data analysis and application technology to the course teaching management. Through the whole process of big data education, service and management. Deepen the integration of the main channel of classroom teaching and students' learning initiative.

(2) Big Data Creates Environmental Conditions for Informationized Teaching Reform and Combines Initiative

Flipped classroom. Through online learning before class, teachers will no longer focus on repeating the knowledge in class, freeing teachers from heavy teaching tasks. By answering questions in class, the teaching focus should be put on the guidance of teaching. Improve the timeliness of ideological and political education theory course teaching in colleges and universities.

MOOC longed for class. It has been widely recognized and used by college students in Chinese higher education. In the process of making MOOCS, teachers also deepen their deep thinking about the teaching content. In the process of spreading MOOCS, teaching information collides with each other. In the era of big data, promoting the pace of the development of teaching information process.

2.3. Influence of Information-Based Teaching on College Students' Employability

Information education is conducive to the cultivation of college students' employability. First of all, the practical characteristics of information education help college students hone professional skills, accumulate professional experience, and achieve the improvement of college students' employability. Information-based education is based on multi-platform practice simulation. It enables college students to apply their professional knowledge outside the classroom and achieve systematic and comprehensive training of professional knowledge and skills through repeated practice, cognition,
practice and cognition. Secondly, the forward-looking characteristics of information education help college students to set up innovative ideas and improve their employability. Information-based education is based on multi-mode guidance cognition. Through entrepreneurial design, enterprise research and case teaching, it enables college students to touch the current situation of the industry, understand the cutting-edge trends of the professional field, and find technical pain points and difficulties, so as to create favorable conditions for self-employment of college students and employment of others. Thirdly, the interdisciplinary feature of information education helps college students consolidate their professional knowledge and improve their employability [9-11]. Through a series of cross-disciplinary exchanges and cooperation, interdisciplinary education and teaching will be realized, which will ultimately help college students broaden their vision and broaden their horizon of knowledge.

3. A Survey on the Correlation between Information-Based Teaching and College Students' Employability

3.1. Research Purpose
This paper uses empirical analysis method, through the analysis of the informationization of universities education situation, accurate understanding of different education levels and different professional background, different gender and case, the university graduates employment ability, an objective analysis of the influence factors of information-based education on college students' employment ability, strive to solve the problem of university graduate employment difficulties.

3.2. Respondents
Select this year's graduates from different institutions of higher learning across the country.

3.3. Survey Method
Prediction tests were distributed in the form of on-site paper questionnaires. The formal survey is distributed in the form of online questionnaire links. Each respondent has a clear ID, which facilitates the statistics of the source of the recovered questionnaire and subsequent descriptive statistics.

3.4. Data Processing
Statistical software SPSS22.0 was used to analyze the data of the questionnaire, and the data processing method was as follows: First, reliability and validity test. Reliability analysis measures the authenticity of data by means of the variance proportional coefficient between the real value and the measured value. Validity analysis verifies the accuracy of data through the similarity of scale results and targets. Secondly, factor analysis. Multiple original variables are grouped, and weights are assigned to extract indicators according to the influence of variables. Each grouping is a common factor, and the integrated variables that could not be observed are represented by this dimensionality reduction method. Third, one-way anOVA; Finally, regression analysis. Regression analysis was conducted on the data collected from the questionnaire to determine the correlation between the variables.

4. Investigation Results of Correlation between Information-Based Teaching and College Students' Employability

4.1. Descriptive Statistics
This paper collects research data through questionnaire survey and distributes it in the form of network questionnaire. In order to ensure the representativeness of the research samples and avoid the influence of school factors on the follow-up experiments, this study selected fresh college graduates from different educational levels and professional backgrounds as the investigation objects, and finally 500 valid questionnaires were selected after screening.
Table 1. Sample descriptive statistics

| Basic information | Number of people | Percentage |
|-------------------|------------------|------------|
| Gender            |                  |            |
| Male              | 274              | 54.88%     |
| Female            | 226              | 45.12%     |
| Professional      |                  |            |
| In science and engineering | 174 | 34.86% |
| Management division | 147  | 29.47% |
| The humanities    | 159              | 31.72%     |
| Other             | 20               | 3.95%      |

As shown in Table 1, it is a descriptive statistics table for the sample. In this study, descriptive statistics were conducted on the control variables to gain a clearer understanding of the sample data. In this statistical sample, 274 male students account for 54.88% and 226 female students account for 45.12%, with a male and female ratio close to each other. In this research, students of science and engineering, economics and management departments and task science students account for 34.86%, 29.47% and 31.72% respectively. The professional analysis of the samples was relatively uniform.

4.2. Relationship between Information Education and College Students’ Employability

In this part, SPSS was used to conduct regression analysis on informationized teaching and college students' employability. Firstly, model 1 was obtained through regression analysis of control variables and college students' employability, and then model 2 was obtained through regression analysis of control variables, informationized teaching and college students' employability.

Table 2. The return of college students' employability

| Control variables | Dependent variable | R2       | Adjusted R2   |
|-------------------|--------------------|----------|--------------|
| Gender            | 0.039              | 0.035    |              |
| Professional      | 0.054              | 0.052    |              |
| Independent       | Information        | 0.213    | 0.209        |
| variables         | education          |          |              |
| R                 | 0.204              | 0.259    |              |
| Adjusted R2       | 0.187              | 0.241    |              |
| F value           | 8.512              | 15.439   |              |

Figure 1. The return of college students' employability
As shown in Table 2 and Figure 1, the influence of major in Model 1 is significant, and gender has an impact on college students' employability. The $R^2$ in Model 2 was greater than that in Model 1 and the Adjusted $R^2$ was 0.241, indicating that the 24.1% of the variance could be explained. The independent variables acted on the employability of college students and were not affected by the controlled variables. The F value is significant at the level of 0.001. The regression coefficients of information education were 0.213 and 0.209 respectively, both reaching the significance level. Therefore, information education has a significant positive impact on college students' employability.

4.3. Relationship between Information-Based Education and College Students' Professional Competence

In this part, SPSS was used to conduct regression analysis on informatization teaching and college students' professional application ability. Firstly, model 1 was obtained through regression analysis of control variables and college students' professional application ability, and then model 2 was obtained through regression analysis of control variables, informatization teaching and college students' professional application ability.

As shown in Figure 2, gender and professional background of Model 1 have no significant influence on college students' professional application ability. The $R^2$ in Model 2 was greater than that in Model 1 and the Adjusted $R^2$ was 0.211, indicating that 21.1% of the variance could be explained, and that the independent variables acted on college students' professional application ability and were not affected by the controlled variables. F value was 15.843, which was significant at the level of 0.001, and the regression coefficient of informationized teaching was 0.219, reaching the significance level. Therefore, the integration of innovation and entrepreneurship education and professional education has a significant positive impact on college students' professional application ability.

5. Conclusions

With the rapid popularization of educational information technology and the influence of big data on people, education has also ushered in a new opportunity for reform. Teaching content, teaching activities, teaching evaluation and so on begin to be digitized comprehensively. The use of big data in the information-based education environment can effectively solve many problems in the teaching process. With the promotion of informationization, informationization teaching has become an important teaching method for colleges and universities to cultivate high-level, innovative application
talents and improve the employability of college students. By analyzing the concept and category of college students' employment and the informatization teaching mode under the background of big data, this paper discusses the influence of informatization teaching on college students' employment ability. Questionnaire survey results show that information education has a significant positive impact on college students' employability and professional application ability.

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