

The Optimization Strategy of Innovation and Entrepreneurship Education in Colleges and Universities under the Background of Big Data

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Abstract: The introduction of big data into innovation and entrepreneurship education in Colleges and universities is of positive significance in achieving the accuracy of information, personalization of education methods and scientization of education platforms. To improve the quality of innovation and entrepreneurship education in Colleges and universities, the innovation of educational ideas and means need to be strengthened with the support of big data. This paper mainly expounds the significance and countermeasures of improving the quality of college students' innovation and entrepreneurship education from the perspective of big data, hoping to play a positive reference role in the reform of innovation and entrepreneurship education, make up for the shortcomings of the traditional education model, and promote the realization of the training goal of innovation and entrepreneurship talents in Colleges and universities as soon as possible.

Keywords: Innovation and Entrepreneurship Education, Big data, Optimization Strategy.

1. Introduction

In China, the total number of college graduates graduating in 2021 reached 9.09 million, an increase of 350000 over 2020, and the employment situation is still grim. As employment continues to become a major issue of concern to all sectors of society, innovation and Entrepreneurship of college graduates, as an important part of the comprehensive reform of higher education, is also an important measure to promote employment. Its education optimization strategy is worthy of in-depth consideration, especially in the digital era[1]. As early as 2015, the general office of the State Council issued the implementation opinions on deepening the reform of innovation and entrepreneurship education in Colleges and universities. The implementation opinions clearly put forward that deepening the reform of innovation and entrepreneurship education in colleges and universities is not only the requirement of the national innovation development strategy, but also the urgent demand for economic quality and efficiency improvement, but also an important measure for high-quality employment of college students. In the reform of innovation and entrepreneurship education in colleges and universities, we should not ignore the changes of the times. We should actively comply with the trend of the times and take necessary measures to optimize education with the concept of "Data-Driven innovation and entrepreneurship". Therefore, this paper will study the optimization strategy of innovation and entrepreneurship education in Colleges and Universities under the background of big data.

2. Current Situation of Innovation and Entrepreneurship Education in Colleges and Universities

2.1. The Concept of Innovation and Entrepreneurship Education Lags Behind, And the Carrier Effectiveness Is Not Paid Enough Attention To

With the call of "mass entrepreneurship and innovation" deeply rooted in the hearts of the people, many colleges and universities are thinking about the development direction of innovation and entrepreneurship education. However, there is the phenomenon of staying on the surface. The policies of "promoting employment by entrepreneurship" and encouraging independent entrepreneurship have not been integrated with the professional education of the school[2].

2.2. Teachers' Experience in Entrepreneurship and Innovation Education Is Insufficient

There are three reasons for this phenomenon. First, the school does not attach great importance to innovation and entrepreneurship. Most of the innovation and entrepreneurship courses in Colleges and universities are carried out by teachers who used to serve as employment guidance in the school, but they have no experience in innovation and entrepreneurship. They have not received systematic innovation and entrepreneurship education and training, resulting in their lack of a new idea to cultivate students' innovation and entrepreneurship ability. Second, due to the shortage of funds in Colleges and universities, they have no extra funds to hire professional teachers to teach, so the teachers of this school are responsible for it. Third, the evaluation system of traditional education for teachers is in conflict with the system of entrepreneurship and innovation education, which occupies most of the energy of teachers, which makes teachers do not focus all their energy on improving the entrepreneurship and innovation education

system.

2.3. Innovation and Entrepreneurship Education Failed to Fully Tap the Data Power and Technical Support of Big Data

First of all, the existing innovation and entrepreneurship education system has a low degree of collection and integration of relevant information, resulting in the lack of necessary data support for entrepreneurship and entrepreneurship education. Secondly, the information processing process of the existing system is simple and empirical, and the hidden rules behind the data cannot be mined, so the degree of intelligence is not high. Finally, the innovation and entrepreneurship education system's prediction of innovation and entrepreneurship opportunities is mostly a combination of automatic analysis and manual experience, and the prediction ability is weak, which seriously affects the accuracy of prediction and the effectiveness of decision-making[3].

3. The New Environment for College Students' Innovation and Entrepreneurship in The Era of Big Data

3.1. The Arrival of The Era of Big Data Has Brought New Challenges to Innovation and Entrepreneurship

The era of big data means that many labor-intensive industries will decline, more labor positions will be replaced by artificial intelligence and robots, and new production modes will be adopted in production methods. This requires schools and students to learn more advanced technologies, change traditional teaching contents, and add new entrepreneurship related courses. Although some schools have recognized this and started to reform, the innovation and entrepreneurship courses set up by the school are still relatively basic, and the attention paid to these related courses is not enough. These courses are only minor subjects in students' leisure time, and students will not spend energy on these subjects, which makes it impossible to achieve the teaching goal of innovation and entrepreneurship[4].

3.2. The Arrival of Big Data Era Provides New Opportunities for Innovation and Entrepreneurship

With the rapid progress of e-commerce related technologies and the widespread use of network information exchange platforms, college students are often able to accurately grasp the opportunities under the economic situation, to find the business opportunities, and to explore the road of entrepreneurship because of their better cultural quality, better vision, insight, learning ability and their own ability[5]. Nowadays, with the development of the financial industry getting better and better, some online consumption and early consumption modes dominated by companies or individuals are increasingly accepted by people. According to the survey data, in the national economic development model in the next 10 years, it will be a major opportunity for the new e-commerce industry, and people are increasingly accepting advanced technologies such as mobile payment.

3.3. The Role of Big Data in College Students' Innovation and Entrepreneurship Education

Big data is widely used in cloud platforms and smart phones, which is the main way of innovation and entrepreneurship education reform. First, big data technology can judge and analyze data, provide students with resources suitable for their own development, and provide reference for students to carry out entrepreneurial activities. Second, big data technology builds a scientific and reasonable data system for customers. This way also provides reference for students, and it is also the guarantee and foundation for incubating entrepreneurial projects[6]. Third, big data technology can explore the needs of the masses for products, and promote the entrepreneurial strategy of customers' needs, so that students can automatically adjust data plans. Fourth, using the statistical function of big data can help teachers achieve the quality of entrepreneurship education, create an accurate education system that meets the needs of students, and then cultivate high-quality college students.

4. The Optimization Strategy of Innovation and Entrepreneurship Education in Colleges and Universities under the background of big data

4.1. Building an Online Network Platform Led by Big Data

Firstly, using big data to collect information on entrepreneurship and innovation to simulate the actual needs of students' users, to strengthen users' operability and sense of experience, and to provide more convenience for students with the advantages of low cost and diversified sharing. Secondly, building a diversified and interactive offline cooperation platform. Through the cooperation with enterprises, government agencies and other colleges and universities, colleges and universities form a diversified and interactive pattern of mass entrepreneurship and innovation, make use of the resource advantages of each main unit, break the deficiencies in traditional practical education, and create a good social environment for students' innovation and entrepreneurship. Through online and offline interaction, building a three-dimensional innovation and entrepreneurship practice platform is more conducive to promoting the cultivation of students' innovation and entrepreneurship ability in practice, so as to achieve the ideal effect of innovation and entrepreneurship education.

4.2. Formulating Incentive Policies

Colleges and universities should attach great importance to the construction of innovation and entrepreneurship teachers, include professional teachers and student counselors into the school innovation and entrepreneurship instructor pool, and cultivate and stimulate students' innovation and entrepreneurship ability at multiple levels. Colleges and universities should encourage teachers to transform into "double qualified" talents, and cooperate with off campus entrepreneurial tutors, entrepreneurial entrepreneurs, professional institutions, and scientific and technological practitioners. Colleges and universities should implement the "young teachers' business trip" plan, and encourage young

teachers to take temporary training in enterprises, participate in the practice of enterprise big data projects and special training on big data. Colleges and universities should bring the latest technological achievements into the classroom, develop innovative and entrepreneurial projects, and cultivate students' innovative ability and entrepreneurial awareness through two-way exchanges and cooperation between school and enterprise teachers.

4.3. Establishing Corresponding New Big Data Information Technology Teaching System

For innovation and entrepreneurship education in Colleges and universities, colleges and universities should establish corresponding new big data information technology teaching system, which will help consolidate teaching achievements and cultivate students' practical operation and information technology application skills from multiple perspectives. Credits can be set to encourage students to actively participate in Virtual Innovation and entrepreneurship teaching experiments. Colleges and universities can reduce the proportion of theoretical courses, appropriately increase the proportion of experimental courses, and set corresponding credits in the new big data information technology teaching system. Colleges and universities can also optimize practical teaching resources and related equipment, optimize and upgrade the traditional entrepreneurship education courses, and pay more attention to the needs of College Students' innovation and entrepreneurship and the current hot spots of entrepreneurship and employment. For the educational practice of innovation and entrepreneurship, colleges and universities can fully tap the application cases of big data information technology, cooperate with the corresponding theoretical knowledge, enrich the content of innovation and entrepreneurship education in Colleges and universities, and enhance students' awareness of innovation and entrepreneurship.

5. Conclusion

To sum up, with the continuous development and popularization of big data technology, innovation and entrepreneurship education will be affected by big data to a certain extent. Colleges and universities should reasonably

apply big data technology to innovation and entrepreneurship education, update educational concepts, implement the student-centered idea, and strengthen the practicality of educational content. At the same time, schools should deepen the cooperation between schools and enterprises, promote the introduction of entrepreneurship and entrepreneurship culture into the campus, improve the innovation and entrepreneurship education system, and truly improve students' innovation and entrepreneurship ability.

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