

## Research on innovation and entrepreneurship education mode of college students under big data environment

Hai Yin

Gongqing Institute of Science and Technology, Jiujiang, Jiangxi, China

3056453@qq.com

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**Abstract:** This paper takes some college students in Jiangxi Province as the research objects. Through the questionnaire survey of innovation and entrepreneurship education mode in the big data environment, the current status of college students' innovation and entrepreneurship education mode is understood, the opportunities and challenges of college students' innovation and entrepreneurship in the background of big data are analyzed, and many problems in the education mode are also found. In view of this, the paper puts forward targeted solutions, grasps the environmental advantages of big data, builds a relatively perfect innovation and entrepreneurship education mode, further improves the effectiveness of innovation and entrepreneurship education, and makes the innovation and entrepreneurship education mode of Chinese college students take a new step.

### 1. Introduction

Innovation and entrepreneurship has been included in the training plan of each major as a compulsory course of all colleges and universities. Through carrying out innovation and entrepreneurship education, students can improve their innovative thinking ability and promote the teaching plan of high-quality talent education. However, the actual situation of the current innovation and entrepreneurship education model is not optimistic, and there are significant differences in teaching effect. How to put forward targeted solutions and relatively perfect innovation and entrepreneurship education model for college students according to the shortcomings of the current innovation and entrepreneurship education model has become a hot issue that education and teaching researchers pay attention to.

The purpose of carrying out research on innovation and entrepreneurship education model of college students under the environment of big data is to understand the connotation of innovation and entrepreneurship and grasp its essence.[1] On the basis of the theory of innovation and entrepreneurship, a diversified education model is set up in combination with the talent training objectives of college students, so as to ensure that students can fully integrate with their major and national economic innovation and entrepreneurship environment after participating in innovation and entrepreneurship education, and take effectiveness as the core evaluation criteria of innovation and entrepreneurship education and the first core element of model construction. Improve the innovation and entrepreneurship education model, multi-dimensional in-depth optimization, improve the education concept and teaching methods, and constantly enhance the teaching effect of innovation and entrepreneurship.

### 2. Survey scheme design and analysis

By carrying out a questionnaire survey of college students' innovation and entrepreneurship education mode in the big data environment, the current expectations of college students for innovation and entrepreneurship mode and college students' participation in innovation and entrepreneurship at school are understood. To understand the problems existing in the current innovation and entrepreneurship education model, and put forward targeted suggestions and

improvement measures. The information collected through questionnaire survey is used as the data support of this study, which makes this study more practical.

In order to better understand the status quo of college students' awareness of innovation and entrepreneurship under the environment of big data, as well as the current attitude and opinions of college students towards the education model of innovation and entrepreneurship, the current status quo of college students' innovation and entrepreneurship can be more clearly recognized, and the data foundation can be provided for the later optimization and improvement of the education model of innovation and entrepreneurship of college students.

The survey objects are mainly college students in Jiangxi Province and alumni within three years after graduation. The ratio of men to women is balanced. The age group distribution is mainly 20-30 years old. In the process of questionnaire survey, the ratio of male to female, the proportion of students in different grades and the proportion of students in different majors were balanced. The questionnaire setting was scientific, reasonable and feasible.

## 2.1. Questionnaire

The questionnaire mainly consists of three parts. The first part is the basic information of the surveyed college students, including gender, major, education background, etc. The second part is the attitude, views and behavior of college students towards innovation and entrepreneurship education. It involves the attitude of college students towards innovation and entrepreneurship education under the background of big data, the specific behaviors of individuals participating in innovation and entrepreneurship at school and the current situation of innovation and entrepreneurship education at school. The third part is mainly related to the innovation and entrepreneurship education model related issues, according to the relevant academic research results proposed targeted innovation and entrepreneurship education model reform measures survey.

1) Pre-test. A pre-test was conducted before the formal distribution of the questionnaire. The revised draft of the questionnaire was sent to 10 students for a pre-test to test the students' understanding of the questionnaire design content. After the test, the contents of the questionnaire were in line with the actual situation of the respondents, and there was no problem that the questionnaire exceeded the cognition of the respondents. However, pre-survey participants put forward individual suggestions for modification of the questionnaire. After consideration and comparison, the questionnaire was revised and finalized.

2) Formal distribution. After the questionnaire was finalized, it was distributed through multiple channels. A total of 3,300 questionnaires were distributed to different surveyors according to the pre-planned target group.

3) Questionnaires were collected. A total of 3,200 questionnaires were collected, among which 50 questionnaires were invalid due to the subjective factors of the interviewees and their information was untrue. Therefore, a total of 3,150 valid questionnaires were collected in this survey, and the effective rate of the questionnaires was 95.4%.

## 2.2. Analysis of basic data

The basic information and statistics of the sample of this study are as follows:

Table 1 Gender of the respondents.

Item/proportion	Number of people (people)	Percentage (%)
Guys	1730	55%
Girls	1420	45%
Total	3150	100%

As can be seen from Table 1, the number of male respondents is 1,730, accounting for 55% of the sample, and the number of female respondents is 1,420, accounting for 45% of the sample. There is little difference between male and female respondents, which is within the acceptable range, indicating that the survey results are not affected by gender. According to the majors of the respondents, engineering students accounted for 35%, science students accounted for 42%, and liberal arts students accounted for 22%. It can be predicted that the distribution of the number of majors of

the survey results is relatively average, and there will be no significant deviation in the survey results. As can be seen from the educational background of the respondents, 72.34% of them are undergraduates and 27.66% are junior college students. The sample diversity is rich and ideal. From the attitude of college students towards entrepreneurship, it can be seen that 34% of college students actively participate in entrepreneurship, 46% support it, and only 12% oppose it. It can be seen that college students have a high enthusiasm for entrepreneurship.

Table 2 Major innovation and entrepreneurship guidance courses.

Types	Frequency	Percentage
Simple book teaching courses	1030	31.7%
As an auxiliary course, only classroom teaching, no extracurricular practice	1470	47.6%
A curriculum that combines teaching of theoretical knowledge with diverse practice	280	9.5%
No courses in this category	370	11.1%

As can be seen from the situation of the courses of innovation and entrepreneurship guidance in Table 2, 31.7% of the surveyed students said that the school only provides simple theoretical teaching in the course of innovation and entrepreneurship education, 47.6% of respondents said that the school does not pay enough attention to the course of innovation and entrepreneurship education, and only carries out theoretical teaching without corresponding practical teaching arrangement in the teaching process. At the same time, 11.1% of the students said that the school did not offer such courses. Only 9.5 percent said their schools offered relevant courses that combined theoretical and practical teaching.

### 2.3. Reliability analysis

This paper obtains data in the form of a questionnaire, and then analyzes the data to get the results. Whether the obtained data is reliable, the reliability of the data obtained by the questionnaire is tested through the reliability analysis and the percentage of the error of the data in the questionnaire is reflected. In this paper, according to Cronbach's Alpha reliability coefficient of Likert scale, the reliability of the data was expressed. The larger the reliability coefficient, the more reliable the reliability of the measurement. The details are shown in the following table:

Table 3 Reliability evaluation criteria.

Cronbach's Alpha values	Standard
Cronbach's Alpha $\leq 0.3$	Untrusted
$0.3 < \text{Cronbach's Alpha} \leq 0.4$	Preliminary research, barely credible
$0.4 < \text{Cronbach's Alpha} \leq 0.5$	Slightly believable
$0.5 < \text{Cronbach's Alpha} \leq 0.7$	Trusted
$0.7 < \text{Cronbach's Alpha} \leq 0.9$	Very believable
Cronbach's Alpha $> 0.9$	Very believable

Export the survey data and convert it into a readable.sav file for spss, which is version 17.0. Then, the reliability analysis was carried out, and the following results were obtained: Cronbach's Alpha value analyzed by spss was 0.852, and the results in the range of the value were very credible, which indicated that the questionnaire data in this paper was credible, and the results obtained by data analysis were credible.

### 2.4. Validity analysis

The questionnaire data in this paper is very important for this paper, so after the reliability analysis, the validity analysis of the questionnaire data is carried out to make the questionnaire more scientific. spss17.0 software is also used to analyze the data KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) and Bartlett test of sphere sphericity test is used to determine whether the data is valid.

Table 4 KMO value criteria.

KMO value	Standard
$< 0.5$	Give up
$0.5 \leq KMO < 0.6$	Very barely
$0.6 \leq KMO < 0.7$	Not a good fit
$0.7 \leq KMO < 0.8$	Fit
$0.8 \leq KMO < 0.9$	Good fit
$KMO \geq 0.9$	Very suitable

Guide the questionnaire data into excel and use spss17.0 to test the validity of each variable, as shown below:

Table 5 Overall KMO and Bartlett's spheroid test of the questionnaire.

KMO measure of sampling adequacy		.850
Bartlett sphericity test	Approximate chi-square	5220.189
	df	335
	Sig.	.000

It can be seen from the detected results that the measurement of KMO is 0.850, then the range indicated is suitable, that is, the questionnaire data is valid, can be used as the reference data of the paper, and the questionnaire results are valid.

## 2.5. Survey results

According to the research on the questionnaire data, it is concluded that college students have high enthusiasm for innovation and entrepreneurship under the big data environment, and it is affirmed that the big data environment will bring more opportunities for innovation and entrepreneurship to college students. However, it is also found that there are still many deficiencies in the education mode of innovation and entrepreneurship of college students at the present stage, which indicates that the education mode of innovation and entrepreneurship of college students still needs to be further improved. In terms of curriculum provision, most participants believe that the current curriculum provision of innovation and entrepreneurship education is still not perfect and needs to be improved. At the same time, the practice of innovation and entrepreneurship education and the content of innovation and entrepreneurship competition are relatively small, many students said that it is not able to improve their own innovation and entrepreneurship practice ability. As for the teachers, the lack of professional degree and experience became the focus of most students. The assessment mechanism also has the problem that the assessment method is not fair and just. Some students with entrepreneurial experience said that the communication between schools and enterprises is not perfect, and they face many obstacles in going out to practice and participating in innovation and entrepreneurship major competitions, which restricts their enthusiasm to participate in new entrepreneurship major competitions.

## 3. Problems in the innovation and entrepreneurship education model of college students

At present, innovation and entrepreneurship education is a compulsory course offered by many colleges and universities. However, due to the restrictions of different colleges' emphasis on such courses and the teaching conditions of the schools themselves, there are many problems in the current innovation and entrepreneurship education model for college students. Finding and solving these problems is an essential process to carry out the research on innovation and entrepreneurship education of college students in the big data environment<sup>[2]</sup>. By referring to the results of relevant literature research, questionnaire survey and years of personal experience in innovation and entrepreneurship teaching, it is found that there are mainly problems in the current innovation and entrepreneurship education model for college students in the following aspects.

### 3.1. Lack of rationality in the setting of innovation and entrepreneurship courses

In recent years, the country has vigorously advocated innovation and entrepreneurship education,

and has also issued corresponding policies and regulations to promote it. Due to the actual situation or lack of emphasis on the curriculum, there are obvious differences among colleges and universities in the opening of innovation and entrepreneurship education courses and the division of curriculum resources. Although colleges and universities have set up relevant innovation and entrepreneurship education courses, they lack scientificity in course selection and content planning, and only focus on theoretical innovation and entrepreneurship thinking consciousness teaching. Some necessary practical courses and related auxiliary courses in the process of innovation and entrepreneurship are not involved at all or less. The existence of this curriculum setting mode makes the efficiency of college students in the process of receiving innovation and entrepreneurship education is not high, or directly leads to the innovation and entrepreneurship courses become the "chicken rib course" in the university curriculum.

### **3.2. Lack of awareness education in the process of innovation and entrepreneurship**

Innovation and entrepreneurship education for college students is, in the first place, the education of consciousness, idea and spirit. However, the current innovation and entrepreneurship education mode focuses on the cultivation of knowledge and ability, and pays relatively little attention to the cultivation of consciousness, which also makes the "entrepreneurial quality" of college students weak at present. From the perspective of students, innovation and entrepreneurship, as a non-necessary option, determines the participation of students mainly influenced by their personal interests. In this case, the sustainability and systematicness of college students' innovation and entrepreneurship will be greatly reduced. Many college students regard innovation and entrepreneurship only as "extracurricular activities" in their college career and do not pay attention to it from the perspective of career planning. Their lack of cognition, passion and quality of innovation and entrepreneurship leads to a considerable lack of rational planning and long-term investment. The innovation and entrepreneurship education mode of college students should be a whole-process education mode covering the cultivation of innovation and entrepreneurship awareness and practical ability. Students' entrepreneurial cognition, entrepreneurial spirit, psychological quality, management and execution should be comprehensively educated. Through the analysis of the questionnaire on the cultivation of ideas and awareness in the current process of innovation and entrepreneurship education, it can be clearly found that, At present, the mode of innovation and entrepreneurship education is quite lacking in the cultivation of consciousness. The emphasis of education is focused on the cultivation of students' ability, while the education of students' correct cognition of entrepreneurship is ignored, which is also the content that innovation and entrepreneurship educators need to pay extra attention to in the later teaching process. In the current opinion survey on innovation and entrepreneurship education, 44.76% of respondents believe that there is a deviation between teachers and students in the current innovation and entrepreneurship education, accounting for nearly half of the respondents.

### **3.3. Lack of practice and participation in innovation and entrepreneurship education**

In the process of innovation and entrepreneurship education, consciousness education and theoretical knowledge education are carried out, which are for the students to serve in the future entrepreneurial practice and competition. The ultimate goal of education is to test in practice and competition. However, through the results of college students' entrepreneurship education in recent years, many college students in the practice of entrepreneurship and competition results are not ideal, most of the losers said that "theory and practice and competition is not consistent" is the main reason for their failure, many college students into the society, the reality of entrepreneurship is not described in the textbook. Complex, changeable, uncertain and other factors are far from the teacher described in the classroom, but unfortunately, when they really practice and competition after the realization of this profound lesson, some people even end the life of innovation and entrepreneurship career<sup>[3]</sup>. Therefore, we should not only reflect on whether our innovation and entrepreneurship education has gone into a misunderstanding. Theory is important, but the failure experience tells us that practice and competition can not be ignored. However, looking at the current innovation and entrepreneurship education of college students, the emphasis on practice and competition teaching is quite lacking, and the innovation and entrepreneurship education of many universities even stays at the pure theoretical

stage. After receiving innovation and entrepreneurship education, students talk freely and confidently when talking about theory, but whether their practical ability, practice and competition ability are as they said? In our questionnaire, we also made a survey on this part of the content, but the conclusion is not satisfactory.

The survey results of innovation and entrepreneurship education practice and participation show that 48.25% of respondents think that the content of practice and participation is too little, and 17.14% of respondents say that the courses are basically theoretical teaching. According to the survey results, although there are some aspects of practice and participation in innovation and entrepreneurship education, However, the proportion is relatively small and still needs to be improved.

### **3.4. The assessment mechanism for innovation and entrepreneurship education is not perfect**

As a course, innovation and entrepreneurship education model needs corresponding assessment mechanism to test its teaching results. As a quality and ability course, the achievements of innovation and entrepreneurship education model, such as innovation and entrepreneurship practice, competition experience, experience, human resources and many other non-solidified contents, cannot be evaluated by quantitative test results. Different from the assessment mechanism of developed countries such as Europe and the United States, the current innovation and entrepreneurship education for college students, in terms of assessment methods, mostly adopts the paper examination or the teacher's subjective scoring mechanism similar to other ordinary courses. Students' participation in the community innovation and entrepreneurship practice and competition experience, and their results in the "Challenge Cup" innovation and entrepreneurship competition are not included in the students' report card. This results in a lack of fairness and credibility in the evaluation of students' scores<sup>[4]</sup>. The survey results related to this aspect in the questionnaire also support this view. In the research process of innovation and entrepreneurship education model, attention should be paid to the assessment mechanism of innovation and entrepreneurship education, and a multi-dimensional scientific assessment mechanism should be built to ensure the fairness and objectivity of the assessment results.

The results of the questionnaire on the assessment mechanism show that 34.29% of students think that the assessment of innovation and entrepreneurship education courses is based on students' theoretical knowledge test scores. Only 15.24% of the students believed that the assessment of the school's innovation and entrepreneurship education courses was based on the process of assessment, emphasizing whether students actively participate in innovation and entrepreneurship related activities. According to the survey results, the assessment mechanism of college students' innovation and entrepreneurship education needs to be improved, and the paper assessment should not be attached too much importance.

## **4. Analysis of innovation and entrepreneurship education mode**

Education mode is the fundamental guarantee of teaching effect. However, through the questionnaire survey and references, it is found that there are still many problems in the innovation and entrepreneurship education mode of Chinese college students in the big data environment. These problems are also the reason for the low effectiveness of innovation and entrepreneurship education of college students in recent years<sup>[5]</sup>. In view of the many problems existing in the innovation and entrepreneurship education mode of college students in the big data environment, this paper proposes the following solutions by referring to the relevant foreign research experience and combining with the current actual situation of innovation and entrepreneurship education in China:

### **4.1. Scientific planning, promoting the construction and reform of the curriculum system**

Although Chinese colleges and universities are still at the groping stage in the curriculum setting of innovation and entrepreneurship, multi-level entrepreneurship curriculum is imminent. Especially in the era of big data, we should run through the training of entrepreneurial awareness and entrepreneurial actual combat in the four-year college curriculum education. First of all, we should carry out various forms and types of courses, form a diversified curriculum system, timely update the

content of entrepreneurship teaching, and make the selection of innovation and entrepreneurship education courses more diversified, professional and comprehensive. Such as: entrepreneurial process management, entrepreneurial design model (conception), entrepreneurial team building, financing and capital action, market and competition skills and other high professional standards, comprehensive courses. Secondly, strengthen the training of practice and competition courses to cultivate the collaborative ability of entrepreneurs. At the same time, in terms of course hours arrangement, the proportion of practice and competition hours should be increased, so that students can have more opportunities to participate in practice and competition training, accumulate more entrepreneurial practice and competition experience, and prepare for personal participation in social entrepreneurship practice and competition in the future. Thirdly, courses such as sharing successful entrepreneurship cases and expert entrepreneurship guidance are introduced to share the entrepreneurial experience of successful entrepreneurs (outstanding alumni). We can also set up special innovation group courses for these students, and carry out spearhead teaching and higher level course guidance for these students, so as to maximize the efficiency of innovation and entrepreneurship education<sup>[6]</sup>.

#### **4.2. Focus on reform and optimize the mode of innovation and entrepreneurship management.**

The innovation and entrepreneurship of college students is a process of continuous development, which not only needs the attention and cultivation of educators, but also needs the support and tracking guidance of the society and the government. Only through the close cooperation of various departments, can we provide all-round and whole-process service, consultation and guidance for the entrepreneurship education of college students. First of all, colleges and universities mainly cultivate college students' awareness, skills and abilities in innovation and entrepreneurship. Secondly, in the entrepreneurial practice and competition, the society, the school, the government or the enterprise provides the capital, the place or the technical support for the entrepreneurship of the college students. The entrepreneurship mentors in the college timely track the problems encountered by the college students in the entrepreneurship, guide the students effectively and reasonably, and help them overcome the difficulties in the entrepreneurship. When college students start a business, school teachers, parents of students and the local government provide appropriate tracking and consulting services. Efficient entrepreneurship instructors can also feed back the successful experience of college students off campus to the entrepreneurship teaching of college students, sharing the joy of success in entrepreneurship, and introduce the problems and failure lessons of off-campus entrepreneurship into the entrepreneurship education cases in time. Enable students to absorb lessons, less detours, help growth and optimize the management model of innovation and entrepreneurship.

#### **4.3. To advocate cooperation and build a practical training and education mechanism of enterprise project participation**

With the rapid development of society and economy, enterprises should also improve their core competitiveness and keep up with the pace of social and economic development. As is known to all, only in order to achieve long-term sustainable development, can an enterprise continuously inject "fresh blood", here "fresh blood" refers to talent and technology. In order to encourage college students to be more active in innovation and entrepreneurship, enterprises and schools need to further cooperate, so as to achieve win-win results through cooperation. Colleges and universities speed up the cooperation with enterprises and the progress of establishing college students' innovation and entrepreneurship bases by using the cooperation mode of "creating practice bases with enterprises and innovation and entrepreneurship education running through them", and construct actual project training that college students can participate in. To provide innovation and entrepreneurship space and platform for college students, to achieve the goal of school-enterprise education integration. This mode of cooperation allows universities to open a new training mechanism based on the needs and appeals of both enterprises and students. On the one hand, college students can learn a lot of practical experience in the entrepreneurial base which is not involved in theoretical knowledge, which greatly improves the enthusiasm and activeness of college students in entrepreneurship. On the other hand, the production technology related problems faced by enterprises with the goal of pursuing efficiency

as the first goal have been solved one by one, and the enterprises have successfully transformed on the road of technological innovation and process innovation.

#### **4.4. Overall planning, the establishment of a high-level teaching team**

For the innovation and entrepreneurship education model to be effective, it is necessary to have a team of high-quality teachers with solid theoretical knowledge and innovative consciousness, take teachers as the best leaders, give play to the exemplary role of students, and lead students in innovation and entrepreneurship. Innovation and entrepreneurship tutors are different from teachers of ordinary subjects. They need teachers who have entrepreneurial experience, have practical management experience in enterprises, are familiar with the operation and management mechanism of corporatization, and have systematic and professional learning experience in innovation and entrepreneurship education. Therefore, in the appointment of teachers, we should abandon the previous employment based on academic qualifications, pay attention to the innovation and entrepreneurship practice and competition experience of teachers, and adopt a comprehensive assessment and employment method. In the selection of teachers, it can be considered to employ a certain number of full-time teachers, select excellent enterprise managers with high education level as part-time tutors, to build a team of compound teachers. At the same time, special training on innovation and entrepreneurship education under the situation of big data should be carried out regularly for existing teachers, so as to improve teachers' recognition of big data, guide teachers to reform teaching methods, and strengthen the application of big data in the selection of teaching content to meet the environmental requirements of big data. By building a professional and comprehensive teaching team, students are provided with a comprehensive, systematic and professional infusion of theoretical knowledge of innovation and entrepreneurship as well as entrepreneurship and innovation practice and competition guidance, so as to ensure the teaching effect of innovation and entrepreneurship, improve the education level of innovation and entrepreneurship, and improve the education mode of innovation and entrepreneurship for college students<sup>[7]</sup>.

#### **4.5. Strengthen practice, improve the innovation and entrepreneurship education model system**

College student entrepreneurship educators, under the background of big data, should constantly build and improve the system of innovation and entrepreneurship professional practice and participation in college student innovation and entrepreneurship competition, integrate and optimize the existing resources of the university, and combine the curriculum with entrepreneurship practice. Organize students to actively participate in various innovation and entrepreneurship competitions, such as: National Internet + "Innovation and Entrepreneurship Competition for College Students," Challenge Cup "National extracurricular academic science and technology works competition for College students, etc. At the same time, organizations at all levels of the university can carry out innovation and entrepreneurship competitions on campus to encourage students to actively participate and stimulate students' creativity and innovation ability. It is also essential to cooperate with off-campus enterprises and the local government to create a business base and employment practice base. The university will take the lead in establishing college student entrepreneurship parks with the support of government policies and abundant resources from enterprises. Under the guidance of the Entrepreneurship Steering Committee, college entrepreneurs conduct management according to the theoretical knowledge they have mastered and the operation mode of the enterprise, simulating the production management process of the actual enterprise. Only after some real combat training can college students find out what deficiencies exist in the operation of the company and what deficiencies exist in the process of starting a business. Only by discovering the problem, can we solve the problem. The conclusion is that it is useless to talk on paper. Transforming theoretical knowledge into practice and competition ability is the core spirit of innovation and entrepreneurship. It also makes the entrepreneurship education of the school play the main role and the innovation and entrepreneurship model of the school become more perfect.



## 5. Conclusion

As an emerging teaching field, innovation and entrepreneurship education mode still needs to be further improved compared with other disciplines. Innovation and entrepreneurship education can greatly solve the employment problem and meet the requirements of quality education. College students should pay close attention to innovation and entrepreneurship education. However, according to the teaching feedback in recent years, as well as the relevant literature and questionnaire survey results, there are still many problems in the innovation and entrepreneurship education mode of college students, and the situation is not optimistic. Based on the current situation of innovation and entrepreneurship education mode of college students and combined with the questionnaire survey, this paper analyzes the opportunities and challenges of innovation and entrepreneurship education mode of college students under the background of big data, and also points out the shortcomings of the current innovation and entrepreneurship education mode of college students. First of all, college students should strengthen the education of entrepreneurial awareness in the education mode of innovation and innovation strategy. Teaching college students to change the concept of innovation and entrepreneurship, establish the concept of innovation and entrepreneurship, create the atmosphere of innovation and entrepreneurship, optimize the management mode of innovation and entrepreneurship, and reform the education mode of innovation and entrepreneurship.

Innovation means to cultivate college students' innovation consciousness, thinking and spirit, while entrepreneurship means to exercise college students' entrepreneurial courage, experience and ability. For the country, the government acts as the compass on the road of entrepreneurship, sees clearly the situation of the world, the country and the society, and promulgates corresponding policies to promote the education mode of innovation and entrepreneurship, so as to create entrepreneurial space for college students. Preferential policy support is the most solid backing. As for universities, they should speed up the reform of innovation and entrepreneurship education mode, optimize the curriculum of innovation and entrepreneurship education, build innovation and entrepreneurship practice bases, and lay the cornerstone for college students on the road to entrepreneurship. For college students, they need to set up the right mentality and keep innovative thinking and consciousness to think and solve problems.

It is of positive significance for universities to promote innovation and entrepreneurship education reform to carry out research on innovation and entrepreneurship education model for college students under the environment of big data, and it is also a necessary course for continuous optimization and development of innovation and entrepreneurship teaching effect. Big data is the entry point of the next era of change, and the big data environment has been formed. Colleges and universities should seize this opportunity, make full use of the advantages of the big data environment, and use data to serve, support and help college students realize innovation and entrepreneurship. Education researchers at all levels must be soberly aware of this point, through deepening the reform to solve the problems in the previous innovation and entrepreneurship education of college students, and constantly improve the innovation and entrepreneurship education model, so that the innovation and entrepreneurship education of college students can be effective, essentially improve the teaching effect, promote the development of quality education in China.

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