

Research on the Cultivation of College Students' Innovation and Entrepreneurship Ability Taking "Xinmiao Program" of Zhejiang Province as an Example

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ABSTRACT

This article takes "Xinmiao Program", the innovation and entrepreneurship program of Chinese college students, as an example. Through an empirical investigation of 162 principals of this program, the author further understands the implementation, practical utility and shortcomings of this program, and puts forward corresponding countermeasures, so as to provide references for the cultivation of innovative talents and the construction of entrepreneurship practice and education system in colleges and universities.

Keywords: college students, innovation and entrepreneurship, Xinmiao program

I. INTRODUCTION

China has always attached great importance to the cultivation of talents. In recent years, the cultivation of innovative talents has become a hot issue in society. College students are the most energetic and creative persons, and their innovation and entrepreneurship abilities reflect the level of teaching. Therefore, colleges and universities have carried out innovative education in the form of classroom teaching, experimental practice, extracurricular activities, science and technology competitions, and achieved great results.

Since 2006, Zhejiang Province has implemented "Xinmiao Program" to invest in excellent projects among full-time undergraduate students or postgraduate students in colleges and universities in Zhejiang Province to carry out innovative research in the field of natural science and engineering technology. Its purpose is to cultivate college students' awareness of scientific and technological innovation, stimulate innovation potential, improve innovation ability, encourage college students to actively participate in scientific and technological innovation activities, so that their theoretical knowledge can be combined with specific practice, which will provide talent support for the

construction of innovative provinces.

Understanding the current situation of college students' innovation and entrepreneurship, paying attention to the problems they encounter and putting forward the corresponding opinions are the prerequisite for promoting the smooth progress of innovation and entrepreneurship plan. Through the investigation of college students' participation in "Xinmiao program", this paper finds out the problems existing in the cultivation of college students' innovation and entrepreneurship ability, puts forward some feasible suggestions, and provides scientific and beneficial reference for the cultivation of innovative talents and the construction of entrepreneurship practice and education system in colleges and universities.

II. RESEARCH METHODS

The whole research is based on "Xinmiao Program". According to the feedback of each project in "Xinmiao Program", the analysis of innovation and entrepreneurship of college students can be obtained. The research group selects 162 principals of "Xinmiao Program" of S University from 2006 to 2016, and carries out questionnaire survey and individual interviews.

The questionnaire mainly focuses on the motivation of participating in "Xinmiao Program", the guidance in the implementation process of "Xinmiao Program", the participation of members, the final results and the effect of improving the innovation and entrepreneurship ability.

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The interview focuses on two questions: what do you think are the problems in the application and implementation of "Xinmiao Program"? What problems have you encountered and what suggestions do you have?

III. THE CURRENT SITUATION OF INNOVATION AND ENTREPRENEURSHIP ABILITY OF COLLEGE STUDENTS

A. College students' initiative in practice, innovation and entrepreneurship is not strong, lacking the impetus

According to the interview and investigation, nearly 62% of the students said that they did not take part in the research and experimental activities actively provided by themselves, but were provided by the teachers and expected to join them. Their participation in the program was a passive participation process, and few students asked to participate in the program actively by the teachers, which involved the students' initiative. It can be seen that more than half of the students are not enthusiastic enough. Even with the guidance of teachers, they may not be able to take the initiative to complete. Most of the students make the task-based mechanical completion, rather than take the initiative caused by interest.

B. The college students' awareness of practical innovation is not strong, lacking the guidance

According to the survey, about 46% of the students want to join the whole plan because they want to exercise their own hands-on ability through the project, while the option of cultivating their own innovation ability only accounts for 28% of the total, which is slightly lower than the former. It can be seen that the purpose of college students participating in "Xinmiao Program" is to enhance their hands-on ability through practice, but they don't take the initiative. As shown in the previous survey, most of the topics are put forward by teachers first, and students are responsible for completing them. Of course, it is not excluded that students find problems in the whole project and put forward new ideas under the guidance of teachers. In the interview, it is found that the students who think actively are in the minority. First, the knowledge and experience they have learned are insufficient. Second, in the whole process of starting the program, most of the students are involved in data research, statistics, sorting and other tedious work.

C. College students' participation in innovation and entrepreneurship is not enough, and their cooperation is not strong

For a project, the whole process from project initiation to project conclusion should be a process of

team communication and cooperation. According to the interviews, it is found that the whole process of college students' innovation and entrepreneurship project is passive from the beginning, most of which are composed by the project leader himself, and the understanding of the project among the members at the beginning is not very sufficient. In theory, the project should be completed by team work. In fact, it is completed by the person in charge. Most members only complete their own parts independently, and there is not much communication, and then the project will be summarized by a single person. In this way, the project process is actually composed of multiple independent parts, which seems to be a whole, but in fact, a large part of its internal members are strangers to each other. Moreover, according to the survey, 69.6% of the projects take about one and a half years from the initiation to the completion, 27.2% of them take about two years, and there even have some unfinished questions. It can be seen that the project cycle is relatively long. During this period, college students usually take over a project in sophomore or junior year. At this time, they have a certain amount of knowledge of relevant professional courses, can take this opportunity to consolidate the knowledge and improve the hands-on ability. However, it is such a time arrangement that leads to the frequent handover of project work, cumbersome process, low efficiency. On the one hand, due to the graduation of the person in charge, it is necessary to reorganize ideas and do a good job in the handover procedures. On the other hand, it has extended the time of the project. All in all, most of the team members are not fully involved in the whole project, and the integrity of the project is not strong.

D. There are many innovative and entrepreneurial projects for college students, but the venture capital is insufficient

Taking "Xinmiao Program" of Zhejiang Province as an example, this program is jointly implemented by the department of education and the department of finance of Zhejiang Province. Although the project is funded by the interest generated by the 100 million yuan, college students' science and technology innovation fund, each project only has the support of 10000 yuan. The capital investment has been increasing year by year since the implementation of the plan. At present, the basic funds for college students' entrepreneurship are mainly provided by their parents and relatives, and operated by their classmates in joint venture, with their own capital as the main capital, which limits the entrepreneurial practice of a considerable number of poor college students with entrepreneurial ideals. College students have a high demand for financial support from relatives and friends and government venture funds.

E. The system of innovation and entrepreneurship of college students is not perfect, and the information popularization is not in place

Taking "Xinmiao Program" as an example, few college students have heard about the relevant content of this program, and only a few of them have learned about it because they participated in this program, which shows that the publicity is not enough. Of course, in the course of the interviews, college students who participated in the survey also successively raised their own problems on this kind of entrepreneurship and innovation programs, such as complicated process, chaotic declaration format, software and hardware debugging, lack of teachers especially responsible for the docking of such projects, less progress inspection, etc. These problems are enough to show the incompleteness of the establishment of entrepreneurship and innovation system for college students, and the system of entrepreneurship and support for college students, including entrepreneurship base, university science and technology park, university entrepreneurship street, is also slowly forming.

This paper has combed the problems existing in the innovation and entrepreneurship education of college students through the survey. First, the theory of entrepreneurship education is still divorced from the reality. According to the survey and interview, when the students were asked, "is your project only staying at the level of thesis or has it entered the stage of practical application after you have finished the project?" 64.1% of students answered that the project was only stayed at the level of thesis. When asking the reasons, the general answer is lack of funds, insufficient internship base configuration, or few opportunities provided by the enterprises. Second, the overall quality of entrepreneurship education is not high. The achievements in the four aspects, such as the education of entrepreneurship awareness, ability training, knowledge learning and practical activities, are not very satisfactory. Third, universities and society have insufficient understanding of innovation and entrepreneurship education. Universities mainly teach students from the knowledge level and future employment level, and ignore the cultivation of entrepreneurship and innovation awareness of college students. Fourth, there is a lack of specialized teachers for entrepreneurial education. Most of the teachers organizing projects do not carry out special training on innovation and entrepreneurship, sometimes they can't give key opinions. Usually, the suggestions need to be supplemented later. Fifth, students believe that participating in entrepreneurship and innovation programs sometimes doesn't bring great advantages to their employment competition. According to the relevant survey, some groups don't insist on entrepreneurship after graduation, and the jobs they seek sometimes are not in line with their majors. Some

enterprises do not know about such programs, and such innovation and entrepreneurship programs seem to be only applied among universities.

IV. EXPERIENCE AND ENLIGHTENMENT OF PROMOTING INNOVATION AND ENTREPRENEURSHIP EDUCATION OF COLLEGE STUDENTS

A. Government: making policies and increasing investment

Innovation ability is a key factor for the development of a country, and the government should pay more attention to it. It is necessary to give full play to the role of the government, and increase the investment of venture capital for college students. For college students who are willing to start a business and have project planning, lack of capital is the biggest obstacle. The government can increase the training of entrepreneurship and innovation for teachers to improve the level of knowledge and skills, so that they can better guide students in innovation and entrepreneurship. At the same time, it is required to improve the environment of entrepreneurship and innovation for college students. It is better to regularly organize college students to visit the innovation base to enhance their interest in innovation and entrepreneurship. Importantly, the government will strengthen the protection of intellectual property rights to ensure that the research and development achievements of innovative and entrepreneurial enterprises of college students will not be infringed or copied.

Moreover, the government should improve the policy system of innovation and entrepreneurship. It is necessary to simplify the process of college students' entrepreneurship and improve efficiency, learn from the advanced concepts of innovation and entrepreneurship education of foreign countries, introduce foreign funds, and set up a number of funding plans to help them obtain funds. At the same time, it is required to develop information technology, build a park platform, pay attention to basic education and cultivate college students' innovation and entrepreneurship, so as to ensure the long-term development of the support system of innovation and entrepreneurship for college students.

B. Colleges and universities: offering courses and the guidance actively

On the one hand, it is necessary to provide courses related to entrepreneurship and innovation training, strengthen the cultivation of college students' awareness of entrepreneurship and innovation, consciously stimulate and guide students' entrepreneurial motivation and put it into practice. Innovation and entrepreneurship courses are arranged in an orderly manner, so that

students can understand them. On the other hand, colleges and universities provide opportunities for college students to innovate and start their own businesses, such as attending some entrepreneurship and innovation lectures, visiting some industrial parks and exhibition halls of innovation and entrepreneurship, and providing practical operation plans to stimulate the interest and enthusiasm of innovation and entrepreneurship. In addition, colleges and universities can also contact various communities in the university to launch some activities to expand the scope of practice, so that it is not only limited in the university, but also should be expanded outside the school to increase the confidence of innovative entrepreneurs.

C. Students: having reasonable positioning and improving ability

First of all, it is necessary to have a clear position. Before the innovation and entrepreneurship, it is necessary to make a self-evaluation first, such as whether you are suitable for entrepreneurship, whether you suffer from hardship or not, whether you have your own ideas and directions about innovation and entrepreneurship, whether you have set a goal for yourself, what kind of work your personality characteristics are suitable for, etc. Only after considering these factors can students make decisions without hesitation. With motivation, it can enhance the efficiency of college students.

Then, students need to improve the overall ability. According to the survey, the team members of a project mainly come from a major. In the process of practice, they can learn from each other and apply what they have learned. For college students, the most obvious improvement is in the ability of teamwork and interpersonal communication, followed by the ability of professional knowledge-based paper writing.

Finally, it is necessary to have a good network of interpersonal relationships. The strength of the team is strong. In the process of innovation and entrepreneurship, students inevitably need to contact with other people. For example, the establishment of a team needs the communication of members; when having the difficulties, students need teacher's guidance and should communicate with customers. Therefore, having a great interpersonal network can often make you get twice the result with half the effort.

In addition, students can use the role of network, television and other media to solve the problems mentioned before, such as complicated procedures, blocked information flow, lack of knowledge and so on. At the same time, it is necessary to strengthen the involvement of media network in the support system of innovation and entrepreneurship of college students. For example, it is better to increase the base number of online questionnaires, set up procedures for handling

online procedures, search for materials, etc. to study and obtain information, and strengthen the innovation and entrepreneurship of college students and the publicity of government policies. Through the establishment of network platform, service and entrepreneurship information can be shared, and market demand information and development trend can be released.

V. CONCLUSION

Through the research on the innovation and entrepreneurship project "Xinmiao Program" in colleges and universities, it is found that although there are some problems in the innovation and entrepreneurship project, it has promoted the cultivation of students' innovation and entrepreneurship consciousness to a certain extent. Colleges and universities can select some excellent teams to enter the "campus innovation and practice area of talent training" and "college student innovation and entrepreneurship incubator" with the help of university student innovation and entrepreneurship service center. With the development of college student innovation and entrepreneurship competition, colleges and universities jointly support and cultivate innovative and entrepreneurial talents, so as to better promote the innovation and entrepreneurship of college students, and further stimulate the enthusiasm of college students for innovation and entrepreneurship. Then, more college students participate in the team of innovation and entrepreneurship, and colleges and universities can guide young people to realize their dreams through innovation and entrepreneurship.

References

- [1] Hong Jian. Research and Countermeasures of the Support System for College students' Innovation and Entrepreneurship in Zhejiang Province [J]. Zhejiang Social Sciences, No.5, 2013. (in Chinese)
- [2] Deng Cong, Chen Lemin, Liu Yemin. Investigation and research of college students' outlook on entrepreneurship, Youth Years [J], 2013 No. 11. (in Chinese)
- [3] Lan Jianhua, An Exploration of Building Innovation and Entrepreneurship Education through the Carrier of Practice Platform among College Students — Based on the Investigation of the Construction of College Students' Entrepreneurship Centre in Beijing [J]. China University Students Career Guide, 2017 (02): 34-38. (in Chinese)
- [4] Shang Yingmei, Zhou Bing, Liu Xinlu, Wang Lili, Research on the Typical Carriers of Cultivating Innovative Talents for College Students — Taking the "Challenge Cup" Chinese College Students Entrepreneurship Plan Contest as an Example [J]. Journal of Innovation and Enterprise Education, 2015, 6(05): 34-38. (in Chinese)
- [5] Jiang Qian, Liu Xiaowei, Hu Guojie, Wu Bingye, A Study on the Path Selection of Cultivation of College Students' Innovation and Practice Ability Based on Innovation and Entrepreneurship Contest [J]. Journal of Liaoning Institute of

- Technology (Social Science Edition), 2016, 18(01): 89-91. (in Chinese)
- [6] Long Haichun, Huang Suoyi, Wei Yuxia, Liu Qian, Huang Li, To College Students' innovative Entrepreneurial Training Projects as The Carrier Set up a System of Education Practice [J]. *The Guide of Science & Education*, 2017(02): 32-34. (in Chinese)
- [7] Hong Jian, Research and Countermeasures of the Support System for College students' Innovation and Entrepreneurship in Zhejiang Province [J]. *Zhejiang Social Sciences*, 2013(05): 140-143+160. (in Chinese)
- [8] Huang Zhaoxin, Shi Yongchuan, On the Current Situation of Entrepreneurial Education of College Students in Zhejiang Province [J]. *Researches in Higher Education of Engineering*, 2010(03):83-86. (in Chinese)