

Exploration of Teaching Reform Based on the Cultivation of College Students' Innovative Ability Under the Background of Epidemic Situation

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Abstract—In recent years, with the progress of society and the development of economy, the social competition is becoming more and more fierce, and the society demands higher and higher innovation ability of college students. As the cradle of cultivating talents, colleges and universities shoulder the heavy responsibility. Teaching is an important means to cultivate students' innovative ability in higher education. There are many problems in the cultivation of College Students' innovation ability under the traditional teaching concept and teaching mode, which cannot adapt to the realization of the cultivation goal of College Students' innovation ability in the new era. Therefore, it is urgent to reform our teaching concept and teaching mode and strengthen the cultivation of College Students' innovation ability. Therefore, this paper is based on the practical necessity of Cultivating College Students' innovation ability, which puts forward the existing problems, and combined with the practice of running a school in our country, reforms and perfects the cultivation mode of College Students' innovative ability, and puts forward the specific strategies and paths to promote the new mode of Cultivating College Students' innovative ability. Taking the actual case as an example, this paper verifies the effectiveness of the reform of College Students' innovation ability training mode. It is expected that this paper will contribute to the establishment of a more perfect innovation education system in Colleges and universities.

Keywords— Innovative Ability; Colleges Students; Epidemic Situation.

I. INTRODUCTION

Recently, innovation ability refers to the ability to produce new ideas, new theories, and new inventions with economic and social value in practical activities [1]. It is the basic quality necessary for talents in the new century, and also the cornerstone of social progress and the core strength of economic development. Today's social competition is not only the competition between talents but also the pursuit of innovation ability. Xi Jinping pointed out that: "In the fierce international competition, only the innovators advance, the innovators are strong, and the innovators win." [2] From the competition between countries, it has become a consensus that innovative talents are the key factor to determine the national economic development. Therefore, in the increasingly fierce international competition, the core is the competition of innovative talents. Colleges and universities are important bases for personnel training. Cultivating the innovation ability of college students is a necessary way to realize the prosperity of the motherland and the rejuvenation of the nation, which is of great significance to the development of economy, society and science and technology in China [3-5]. Strengthening the

cultivation of College Students' innovation ability is not only the only way to realize the great rejuvenation of the Chinese nation, but also the inevitable requirement of the current society for college students. Under the background of increasingly fierce competition in various industries, College students gradually realize that university is an important stage to improve their thinking ability, accumulate scientific learning methods and forge comprehensive ability [6]. In the field of learning, middle school students gradually realize that the cultivation and development of innovation ability is an important way to improve the overall quality of individuals.

The cultivation of college students' innovation ability depends on the innovation environment of colleges and universities. Innovation experimental teaching is an effective way to cultivate college students' innovation ability, which can stimulate students' innovation consciousness, improve their innovation skills, exercise their innovative thinking, and cultivate their innovative character [7].

Therefore, it plays an important role in the process of cultivating college students' innovation ability [8]. Teaching is an important means to cultivate students' innovation ability in university education. Teaching not only endorses students with abundant professional knowledge but also cultivates students' innovation ability and comprehensive ability to solve complex environmental problems. The optimization of teaching mode and the improvement of teaching quality are the important links of educational reform, and also the practical needs of constructing and cultivating innovative talents. The traditional teaching idea and teaching mode cannot adapt to the achievement of the goal of cultivating college students' innovation ability in the new era, and it is urgent to improve the unreasonable status [9].

II. EXIST PROBLEMS

The cultivation of college students' innovative ability involves many contents, including innovative consciousness, innovative spirit, innovative thinking, innovative methods and so on [10]. Among them, the consciousness of innovation is the inner motivation for college students to carry out innovative activities, and it is the basic accomplishment and inner quality that college students should have. Without the consciousness of innovation, it is impossible to talk about innovative thinking and innovative achievements. Therefore, the cultivation of innovation consciousness is the key premise of the cultivation of college students' innovation ability

(1) Lack of emphasis on practice and innovation

Subject competition provides a platform on which students can combine the theoretical knowledge they have learned with the theme of the competition, think and design the scheme by themselves, and present each part of the scheme in the form of works through constant modification and in-depth work. In the process of competition, students can deepen the understanding and mastery of the knowledge they have learned through practical application. The synchronous development of abstract thinking and image thinking can further improve their thinking ability and practical ability. At present, most of the training of college students in some application-oriented colleges and universities in China is confined to the level of books, but there is no in-depth research on the practice process of book theory. Although many colleges and universities set up relevant innovation and entrepreneurship courses, students do not pay attention to them, resulting in a little effect.

(2) No systematic training system for innovative talents

At present, about the definition of innovative talents cultivation and policy is still not completely digested. There are still a lot of universities, the main focus lies in the students' employment problem and further education, innovation training courses requires careful experience for a long time to find its inherent charm, but schools tend to set the lower classes in this aspect, students cannot realize the true meaning of course and cannot raise their learning spirit, lose on the course. In terms of interest, the school's progress in talent development is slow. After-school experiment, enterprise practice and curriculum design still occupy a large part of the practice of school innovation training process, most of the students simply finish the task to avoid failing to finish hastily; However, interest is the best teacher, students perfunctorily complete the practice of the course. In turn, the teacher will copy the book or presentation to read through, so this vicious circle of education is difficult to cultivate innovative talents.

(3) The allocation of resources for innovative education is insufficient

Innovative education is inseparable from practice. College of software and hardware facilities is not perfect, however, at the same time because of lack of entrepreneurship and practice experience, most of the teachers themselves lack of practical experience, not enough broad vision, not from the inherent teaching concept, and teaching thought still stays on the theory of achievement. From the perspective of the overall Faculty of colleges and universities, the majority of teachers are proficient in traditional education, However, the proportion of teachers who are good at cultivating students' personality and guiding students' innovative thinking is low. The overall concept of university education is still in the stage of traditional education concept at least. Although the teachers' academic level is very high, the guiding ability of students' innovative consciousness is far from enough. Now many old teachers in Colleges and universities are not strong in understanding and mastering new things, which makes many

modern intelligent teaching tools not play an ideal role in innovation education. Universities do not attach importance to guide the students creative ability, to convey to students, entrepreneurship education knowledge completely. As a result, college students lack an in-depth understanding of the connotation of innovation, which is also the reason why the cultivation of innovative talents in colleges and universities is not effective.

(4) Students lack of innovative motivation

Under the background of the new era, college students generally have a consciousness of innovation, but it is far from enough to cultivate the innovation ability only with the innovation consciousness. The cultivation of the innovation ability is based on the innovation desire and the innovation emotion. The cultivation of innovation ability is a long and arduous process, which requires students to invest a lot of time and energy, And the results cannot be reflected in a short time, which requires students to have firm faith and strong motivation. However, some colleges and universities adopt a simple evaluation system based on performance, which can not reflect the real and comprehensive level and ability of students, but also lead to the lack of innovation motivation of students to a certain extent and curb the development of students' innovation ability. Therefore, there are many innovative activities in the early stage of participation enthusiasm is very high, for a long time or encounter greater difficulties when students can not adhere to the situation. Over time, the students' enthusiasm for innovation has been exhausted.

(5) Classroom teaching method is not conducive to the cultivation of innovative talents

For a long time, teachers can't take the initiative to teach students, but they can't take the initiative to teach students. The assessment form and evaluation mechanism of the course are too rigid, often based on the test results, which cannot stimulate the students' innovation and enthusiasm in their usual study. This classroom teaching method which ignores the cultivation of students' innovative ability leads to many students being satisfied with the existing professional courses and examination results, and are not willing to spend time and energy in other aspects.

III. EFFECTIVE MEASURES

Colleges and universities should take college students' innovative ability training mode reform and upgrading path to study the main line, along with the "ask questions - present situation investigation, analysis, problem-the specific strategies and paths are recommended for promoting college students' innovation ability" train of thought, makes every effort to achieve clarity, in view of the main problems on research, draw lessons from the foreign advanced experience of college students' innovative ability training by combining with the practice of running a school in China [11]. This paper reform and perfect the cultivation mode of college students' innovative ability, and puts forward specific strategies and paths to promote the new cultivation mode of college students' innovative ability.

(1) The transition of the innovative talents training target college students themselves,

The ability to absorb knowledge at the peak of life, able to bear the brunt of explore scientific world in the process of failure and frustration, whether from the perspective of personal development, and to give back to society, to motivate their innovation, is the vanguard of the new era of innovation. For local applied undergraduate colleges and universities, the training goal of the innovative talents should encourage students' comprehensive use knowledge to put this to use, with innovative thinking to solve practical problems in engineering practice, to cultivate a large number of local economic construction and social development in urgent need of professional talents, so as to achieve the goal of cultivating applied talents.

(2) Expansion of innovative training resources

The domestic many colleges and universities is not well understanding of creative education, was not aware of the innovation ability training is the important aspect of teaching reform in colleges and universities, is one of the core according to judge the competitiveness of colleges and universities, from multiple pathways, including schools, local governments, industry attaches great importance to the innovative talent training in many aspects of software and hardware facilities.

In order to better complete the cultivation of talent innovation, the university needs to seek support from the government, introduce the necessary experimental equipment and innovation and entrepreneurship teachers in the university, set up college students' innovation and entrepreneurship fund, and actively encourage college students' innovation and entrepreneurship. According to the training objectives of innovative talents and the needs of enterprises, the university takes the lead in joint training of innovative talents with enterprises, establishes an education mechanism that integrates advanced industrial elements into teaching resources, establishes an ecological chain of innovative talent training of "discipline-professional-industrial chain", and forms an innovative talent training team of "industry, politics, and education".

(3) Improvement of innovative training system

Only by perfecting the existing teaching system can the innovation ability training education of college students endure for a long time. Therefore, innovation practice should be the key to talent cultivation. Colleges and universities should set up relevant courses and competitions, select disciplinary competitions and innovation and entrepreneurship competitions suitable for related majors, and cultivate students' innovative practice ability and thinking from different levels and angles. Finally, students use their majors to support the relevant competitions to promote the professional teaching reform, through competition and teaching to make students take the initiative to practice innovation ability, promote the standardization of innovation ability training of college students.

(4) Development of students' enthusiasm

The essence of innovation is breakthrough, breaking the imprisonment of fixed thinking is the key to train students' innovative thinking. Today's college students are doing rote learning and are not good at drawing inspiration from things around them. The main line of school education reform should be based on the original theory, and then to improve the creative thinking, improve the ability to find and solve problems for the purpose of change, so as to fundamentally improve the innovation ability of students. In daily teaching, more "participatory" teaching can be used, combining the latest patents, journals and experiments with the classroom, giving students enough space to think, and making students feel personal and inspired.

(5) Increase corresponding incentives

Colleges and universities should change the way students' ability evaluated, increase the corresponding incentive measures and encourage students to participate in disciplinary competitions. At present, the evaluation mode of scholarship, outstanding students, and other aspects in colleges and universities still stays at the level of classroom results, which leads to students only focusing on exam results in order to obtain school honors, and to a large extent, the enthusiasm and innovation consciousness of students are obligated.

The school should establish incentive policies to quantify the results of the competition, for example, how many points will be added in the evaluation of the scholarship corresponding to the first prize, or the opportunity to go to the off-campus internship if the ranking is obtained, so as to stimulate the enthusiasm of students to participate in the competition. Guidance for competition, meanwhile, the teacher also should take corresponding incentive system, for example, to participate in the competition on professional evaluation guidance teacher points to a certain extent, or on the year-end assessment offer a certain reward, etc., to get the guidance of teachers' place should also be equipped with additional incentives, etc., to encourage teachers to cultivate students better, try to improve students' innovation consciousness and practical skills [12].

IV. CASE-BASED ANALYSIS

Since the 18th National Congress of the Communist Party of China [13], Anhui University of Finance and economics has actively responded to the call of the party and the state for "mass entrepreneurship and innovation". It has adhered to the "four in one" education system of knowledge exploration, ability improvement, quality training and personality cultivation. It has closely focused on practice, continuously strengthened students' entrepreneurial awareness, and stimulated their entrepreneurial potential.

To enhance students' employment competitiveness and independent entrepreneurship ability, we have formed the "six axis linkage" innovation and Entrepreneurship Talent Training Concept with the characteristics of safety and finance, including education, competition, training, practice, research and policy. The opinions of Anhui University of Finance and Economics on promoting innovation and Entrepreneurship

Education issued by Anhui University of Finance and economics emphasizes the "Four Combinations" of innovation and entrepreneurship education, namely, the combination of innovation and entrepreneurship education with professional education, the combination of personalized development of students, the combination of entrepreneurship practice and career planning. Thereafter, innovation and entrepreneurship education is promoted to the same important position as professional education, and innovation and entrepreneurship is taken as one of the seven curriculum platforms of talent training program; We should pay attention to the education and teaching reform of talent training mode, encourage colleges and departments to adjust the professional curriculum, tap and enrich the innovation and entrepreneurship education resources of various professional courses, for example, in the process of education and teaching, the design major of Art College combines the curriculum education of students with product design and patent application, and pays attention to inspire students' innovative thinking while imparting knowledge; The online courses of innovation and entrepreneurship platform are set up, and the number of students is gradually increased from dozens at the beginning to thousands, inspiring students' innovative and entrepreneurial thinking.

By organizing students to participate in various kinds of innovation and entrepreneurship competitions, the school stimulates students' enthusiasm to participate in innovation and entrepreneurship, and realizes "promoting learning by competition". All colleges and universities are encouraged to create the brand of innovation and entrepreneurship competition in combination with the characteristics of disciplines and specialties, forming the "one institute, one product" competition, such as the revival planning competition of enterprise failure cases in the school of economics, and the financial investment innovation competition of college students in Finance College. In 2017, the University hosted the third Anhui Province "Internet +" college students innovation and entrepreneurship competition. The university pays attention to the construction of innovation and entrepreneurship student associations. Up to now, it has established more than ten innovation and entrepreneurship student associations, such as college student entrepreneurship Association, scientific research and Innovation Research Association, which has played a positive role in stimulating the enthusiasm of college students to participate in innovation and entrepreneurship.

Through project research and other ways, the school trains students' ability of independent thinking and improves their innovation and entrepreneurship level. We should attach importance to the application and construction of College Students' innovation and entrepreneurship training program, release relevant systems, refine the management of the project, and encourage all teachers to participate in the guidance.

The school establishes the security system through the establishment of system, organization, guarantee funds and other measures. A series of documents have been issued, such as "measures for the management of innovation and entrepreneurship training program project of Anhui University

of Finance and economics" and "management measures for innovation and entrepreneurship competition of students in Anhui University of Finance and economics". The school will incorporate the funds needed for innovation and entrepreneurship education into the annual budget of the school. In recent years, the university has invested an average of more than 5 million yuan a year in the construction of College Students' innovation and Entrepreneurship Training Program projects, and about 600000 yuan per year for innovation and Entrepreneurship Competition Awards. In 2014, the school established an entrepreneurship College (virtual body), relying on the school of entrepreneurship, contact the academic circles and industry entrepreneurship tutors to do a good job in the inspiration and education guidance of college students' innovative and entrepreneurial thinking.

In recent years, Anhui University of Finance and economics has won more and more awards in innovation and entrepreneurship competitions at provincial level and above. Taking the mathematical modeling contest for college students as an example, since 2015, it has won 123 international awards. In recent three years, the number of College Students' mathematical modeling teams in China has reached a record high. There are about 80 teams participating each year, accounting for more than a quarter of the participating teams of colleges and universities in Anhui Province. In 2022, it won 2 nominations for international special awards, 3 international first prizes and 6 international second prizes; Since 2013, 1219 national projects and 2645 provincial projects have been approved. The number of projects approved has ranked first in the province for many consecutive years. In 2016, the number of local universities ranked the second in China. In the Eighth National College Students' innovation and entrepreneurship annual conference, the University's innovation project achievements as the only selected paper in Anhui Province participated in the national exchange; In 2021, the 7th China International "Internet +" college students innovation and entrepreneurship competition won 3 National bronze awards, 7 provincial gold awards, 30 silver awards and 30 bronze awards; In 2022, the 10th "Challenge Cup" Anhui College Students' Entrepreneurship plan competition won one gold award, eight silver awards and eight bronze awards, and the University won the "excellent organization award". Thus it can be seen, the innovative ability training mode of college students studied in this paper has achieved initial results.

V. CONCLUSION

This paper analyzes the present situation of the cultivation of innovative talents in colleges and universities under the new situation and expounds on the main problems existing at present. Combined with the need of cultivating innovative talents, this paper puts forward a rational reflection on the current cultivation mode system of college students' innovative ability from the perspective of students' demand and system perfection. For the cultivation of college students' innovation ability, we should change the goal of cultivation of innovative talents, expand the resources of the cultivation of

innovation, improve the system of cultivation of innovation, and enhance the enthusiasm of students.

ACKNOWLEDGMENT

We thank the anonymous reviewers and editors for their very constructive comments. This work was supported in part by the Natural Science Foundation of the Higher Education Institutions of Anhui Province under Grant No. KJ2020A0011, Innovation Support Program for Returned Overseas Students in Anhui Province under Grant No. 2021LCX032. the Science Research Project of Anhui University of Finance and Economics under Grant No. ACKYC20085, Undergraduate teaching quality and teaching reform project of Anhui University of Finance and Economics under Grant No. acszjyyb2021035.

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