

Teaching Model of Innovation and Entrepreneurship Education of Forest Industry in the New Media Era Based on Big Data Analysis

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Abstract:

Innovation and entrepreneurship education of forest industry is a new member of the higher education system, and its development has attracted the attention of our society. In order to optimize the effect of innovation and entrepreneurship education, colleges and universities should build a new experimental teaching mode for the purpose of cultivating innovative and entrepreneurial talents according to the requirements of social development for innovation and entrepreneurship education and the current situation of experimental teaching in Colleges and universities. Colleges and universities should first innovate the contents, methods and curriculum system of experimental course teaching, strengthen the planning of students' independent innovation practice, so as to improve students' practical ability and innovation and entrepreneurship ability. According to the current situation of innovation and entrepreneurship education and experimental teaching in Colleges and universities, based on the requirements of social development for students' innovation and practice ability, this paper puts forward the corresponding strategies of innovation and entrepreneurship education experimental teaching reform. The experimental results show that the strategy innovates the innovation and entrepreneurship curriculum design and teaching content, and improves the students' practical and social adaptability.

Keywords: *Innovation and entrepreneurship education, forest industry, experimental teaching mode, teaching content, big data analysis.*

I. INTRODUCTION

Under the market economy reform, innovation and entrepreneurship education in Colleges

and universities also needs structural adjustment and optimization [1-2]. The focus of supply side structural reform is to reduce ineffective and low-end supply, guide the continuous adjustment of supply and demand structure, and finally achieve "precise supply". In the process of innovation and entrepreneurship education development in colleges and universities, due to the lack of strategic planning, there are ineffective supply and backward production capacity. For innovation and entrepreneurship education, the academia has carried out extensive and in-depth discussion, with certain theoretical results [3]. After the economic structure adjustment changes from the demand side to the supply side, the Countermeasures of innovation and Entrepreneurship Education under the education supply side reform is an urgent theoretical field.

After 15 years of development, there are some misunderstandings in some aspects of innovation and entrepreneurship education in Colleges and universities [4-5]. These misunderstandings and prejudices directly lead to the development of innovation and entrepreneurship education in China to a large extent staying in theoretical research. After literature analysis, we found that a large number of relevant literature focused on the exploration of fixed paradigm, but did not go deep into the source to explore how innovation and entrepreneurship education needs to adapt in the process of economic restructuring [6]. Based on the transformation of national economy, the promotion of university reform, the dislocation of talent supply and demand and other factors, education supply side reform becomes inevitable [7]. Through the exploration of education supply reform, it provides us with new ideas for the innovation and entrepreneurship reform of Universities under the economic transformation, and finally forms a high-quality external environment and constructs an innovation and entrepreneurship education ecosystem with multiple subjects. Based on this, we should combine Internet plus thinking to improve the foresight of education and create a community for innovation and entrepreneurship education.

Generally speaking, exploring the objective existence of innovation and entrepreneurship education in Colleges and Universities under the economic system is the endogenous driving force of innovation and entrepreneurship education, and the countermeasure analysis of innovation and Entrepreneurship Education under the education supply side reform has become an urgent topic to be comprehensively explored. The research on this topic can provide new ideas for the reform of innovation and entrepreneurship education, realize the effective accumulation of human capital, and solve the contradiction of employment structure from the root.

II. PROBLEMS IN THE DEVELOPMENT OF INNOVATION AND ENTREPRENEURSHIP EDUCATION IN COLLEGES AND UNIVERSITIES

2.1 The demand side demands of the development of innovation and entrepreneurship education in Colleges and Universities

(1) Colleges and universities need a comprehensive understanding of innovation and entrepreneurship education

Since the "innovation and entrepreneurship education" was proposed, the Ministry of education has issued many documents and regulations to support the development of innovation and entrepreneurship education in Colleges and universities, according to the "China report on Entrepreneurship Education (2015)" [8]. We can see that, at present, the rapid implementation of innovation and entrepreneurship education in Colleges and universities in China is worthy of recognition, but the innovation and entrepreneurship education in Colleges and universities is still in the state of "amateur education", and the quality of education is not very ideal. Since the end of the 20th century, there have been two major structural adjustments in the development of colleges and universities in China: the expansion of college enrollment and the implementation of entrepreneurship education, trying to realize the expansion of college enrollment by accelerating the accumulation of human capital to transform simple workers into knowledge workers. On the basis of realizing the adaptation of human capital content and "innovation driven" economy, it also causes some invisible pressure to the society. The expansion of enrollment without considering the social demand brings about a sharp rise in the number of college graduates, but there is no corresponding such a huge accommodation system to receive these graduates [9-10]. The purpose of innovation and entrepreneurship education is to balance the contradiction between enrollment expansion and social demand, but there are always some ideological misunderstandings in the process of entrepreneurship education. Some people think that entrepreneurship is the choice of poor students whose academic performance is not ideal, which is the business of a small number of people. Some people think that entrepreneurship education is a direct vocational skill training, which is a form of vocational education. Some people think that the evaluation of innovation and entrepreneurship education is a simple evaluation of the number and income of the enterprises founded by the educated. The college students comprehensive entrepreneurship system in campus entrepreneurship competition is shown in Figure 1.

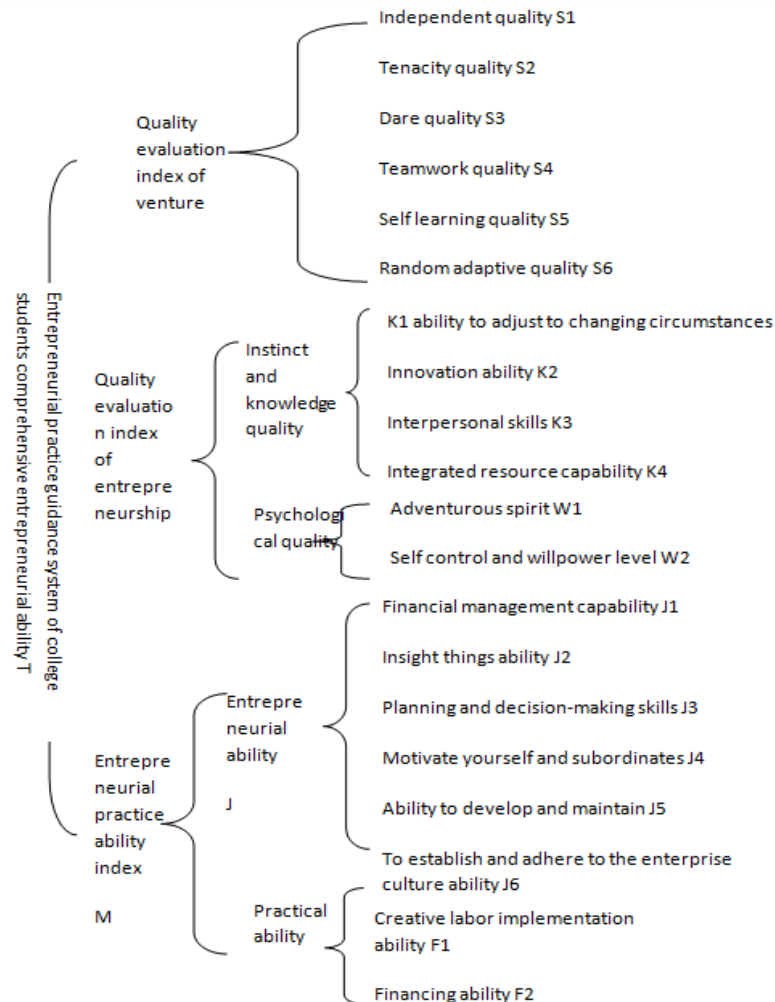


Fig 1: The college students comprehensive entrepreneurship system in campus entrepreneurship competition

(2) Colleges and universities should establish perfect innovation and entrepreneurship education theory

Curriculum is the implementation carrier of education, many colleges and universities have opened the innovation and entrepreneurship related courses, the number of courses is increasing, the content is gradually divorced from the social reality, and gradually goes against the original intention of the curriculum, to the metaphysical discipline form, so there is a formal curriculum which is not strong in innovation and entrepreneurship consciousness and ability promotion. In the process of curriculum system construction, there are several problems need to be paid attention to. One is the form of curriculum, the subject curriculum that can be expressed

by language and symbols, the activity curriculum that can transfer tacit knowledge in the interactive process, and the activity curriculum that can obtain experience in the relatively simulated practice environment, all of which can transfer the awareness and ability of innovation and entrepreneurship. The second is the content of the course. The awareness of innovation and entrepreneurship includes the cultivation of entrepreneurial knowledge, entrepreneurial needs, entrepreneurial spirit, etc. the ability of innovation and entrepreneurship includes the ability to be sensitive to potential value, the ability to endure hard struggle, and the ability to coordinate all aspects of work. The third is teaching method, teaching method, practice teaching method and post education method. Post education effectively combines general education with professional education, so that students can master the basic knowledge of entrepreneurship, improve the comprehensive quality of entrepreneurship, and enhance the ability of entrepreneurship.

The construction of teaching staff is the human basis for the implementation of education. The main sources of teachers are: Full-time Teachers in the college, relevant staff in the employment and entrepreneurship center, and entrepreneurs with entrepreneurial experience in the society. Full time teachers overemphasize theory and ignore practical application, and entrepreneurs' experience is persuasive and infectious. But the successful experience of a single group cannot be simply copied. The construction of professional teaching staff, starting from the source of innovation and entrepreneurship education teachers, should strengthen the training of full-time teachers' practical ability, allow full-time teachers of the college to enter enterprises, start their own businesses, and participate in the experience sharing of successful entrepreneurs from time to time. In terms of knowledge structure and comprehensive ability, we should be more professional. In the process of re education, we should teach the students more systematic and professional knowledge system through theory and practice.

2.2 Problems faced by innovation and entrepreneurship education in Colleges and Universities under supply side obstruction

(1) The school's personality has not yet fully emerged

President Xi pointed out in the report of the 19th National Congress of the Communist Party of China that the main social contradictions in China have been transformed into the contradictions between the people's growing needs for a better life and the unbalanced and inadequate development. In the field of education, the main contradictions are reflected in the contradictions between the national economic and social development and the people's requirements for good education. It is urgent to deepen the reform of higher education. At present, in the process of university construction, the phenomenon of homogenization is very

obvious, and the characteristics of the university are missing. There is a term called "homogenization" in market economy, which means that commodities of different brands in the same category imitate each other in appearance, performance and even marketing means, leading to the phenomenon of commodity convergence. On the other hand, China's colleges and universities have the tendency of "homogenization" in specialty setting, discipline construction and teacher structure, and lack of their own characteristics, positioning and development direction. The supply mode of colleges and universities tends to be the same, the supply mode is single, the structure of teachers is rigid, and the teaching concept is rigid.

(2) The evaluation mechanism of innovation and entrepreneurship education is not perfect

Innovation and entrepreneurship education involves many core links, which is a complex educational process. From the activation of entrepreneurship consciousness, the teaching of entrepreneurship theory to the operation of entrepreneurship practice, each link has its own characteristics, and it is necessary to evaluate each link. At present, the evaluation criteria of entrepreneurship education in Colleges and universities focus on three directions: Data orientation, ability orientation and championship orientation. Data oriented evaluation advocates to measure the effect of entrepreneurship education with Entrepreneurship rate, ability oriented evaluation tries to evaluate the effect of entrepreneurship education with internalized entrepreneurial quality and externalized entrepreneurial behavior, and the championship points to identify students' entrepreneurial ability through the number and performance of students participating in the competition. The significance of education evaluation is to evaluate the quality of innovation and entrepreneurship education, guide and restrict the reform and development of innovation and entrepreneurship education with the market, so as to establish a set of scientific and effective evaluation system, realize the deep adjustment of innovation and entrepreneurship education structure, and create the ecological atmosphere of public Entrepreneurship. The basic flow chart of the business practice data mining is shown in Figure 2.

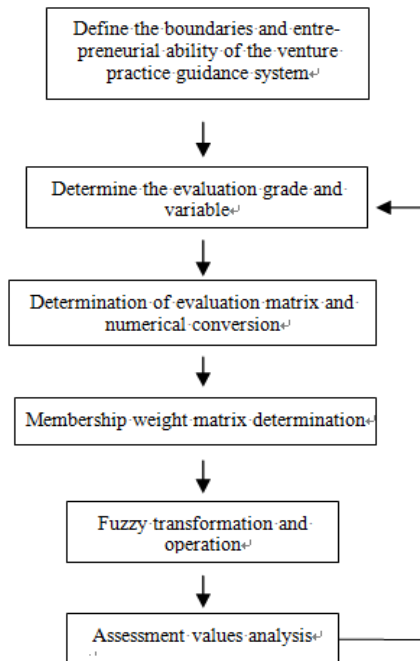


Fig 2: The basic flow chart of the business practice data mining

III. ANALYSIS ON THE CAUSES OF THE PROBLEMS OF INNOVATION AND ENTREPRENEURSHIP EDUCATION IN COLLEGES AND UNIVERSITIES UNDER THE SUPPLY SIDE REFORM

3.1 The trend of the construction of the task target system of innovation and Entrepreneurship Education

Education itself is to excavate students' inner enthusiasm for learning knowledge from the bottom of their heart, and awaken students' desire for knowledge. Maslow's hierarchy of needs theory divides people's motivation into seven levels from low to high. The highest level is the need of self realization, which refers to the intrinsic motivation of pursuing the value of life after meeting the needs of physiology, security, belonging and love, self-esteem, knowledge seeking and aesthetics. Entrepreneurship is a kind of unique thinking, creative world outlook, and self realization and satisfaction of personal potential. From the perspective of students themselves, the recognition of innovation and entrepreneurship education is relatively low, which can be analyzed from two aspects: the deviation of thinking set and self-efficacy. Thinking stereotype simply means that people treat problems with habitual and fixed thinking, analyze problems, solve problems with rigid and rigid thinking, and process problems specifically. This kind of inertia thinking mode hinders the development of creative thinking.

The core element of innovation and entrepreneurship education is the cultivation of talents and the excavation of innovation elements. In reality, innovation drive is essentially talent drive. A person's ability to solve problems with the expected results in a specific situation is his belief in whether he can engage in a certain behavior and achieve success. It is an individual's cognition of his own ability. In a specific sense, it shows an individual's attitude towards coping with challenges. In pedagogy, the sense of self-efficacy is regarded as a factor influencing students' motivation, and the individual's perception of their own competence is divided into four directions: high to low, high to high, low to high and low to low. When the perceived difficulty of a task is about 50%, students are more likely to accept the task and try to complete it, that is, they firmly believe that "I can do it".

In the process of innovation and entrepreneurship education, college students' entrepreneurial competence refers to the talents, qualities and knowledge that college students show in the process of entrepreneurship and can play the role of entrepreneurs and ensure the good development of the ongoing entrepreneurial projects. Therefore, the choice of educational objectives, the division of educational objects and the determination of teaching tasks need to fully consider the way and ability of education acceptance, and reform from the supply side.

3.2 Formalization of teaching practice system of innovation and Entrepreneurship Education

For college students who have just entered the society, restricted by a series of factors such as funds, experience and resources, the probability of independent participation in entrepreneurship is very low. The selection of entrepreneurial projects, the determination of entrepreneurial partners, the grasp of entrepreneurial opportunity and the search for entrepreneurial funds all require students to have the ability of independent thinking, rich knowledge, insight, imagination, the ability to respond to uncertain factors, practical ability and adaptability to difficult environment. In the process of entrepreneurship education, university education is not only to simply and rudely transfer the necessary knowledge and skills to students, but also to let college students learn to use these knowledge and skills to understand the real world, realize their self-worth and promote the development of society. Innovation and entrepreneurship should penetrate into students' thinking and behavior. The honorary president of Peking University thinks that the necessary support of innovation and entrepreneurship education is the innovation idea, innovation spirit and entrepreneurship ability formed under the specific education. Innovation and entrepreneurship education should be an all-round and multi perspective education process.

However, at present, the teaching of innovation and entrepreneurship education is becoming a mere formality. Teachers are only responsible for imparting relevant theoretical knowledge to

students, and do not pay attention to students' psychological changes. They do not encourage students to break through the shackles of existing rules. Students lack strategic vision in real life and lack the cultivation of emotional intelligence. In this regard, Harvard University's innovation and entrepreneurship education adopts the "case teaching method", which puts students in the role of entrepreneurs, allows students to learn what is Entrepreneurship and how to start a business, analyzes and discusses the practical problems encountered in the process of entrepreneurship, and cultivates students' marketing ability, communication and coordination ability and crisis handling ability.

3.3 The subjective existence of the evaluation management system of innovation and Entrepreneurship Education

At the government level, we should make a comprehensive plan for education development, and on this basis, strengthen policy supply, give support to all levels, help universities establish entrepreneurship curriculum system, teachers and management institutions, and help promote scientific and technological achievements. On the premise of ensuring policy supply, we should also consider the impact of "time lag effect" of policy. The time delay effect first appeared in the field of economics, which is used to indicate the distance between the actual effect of monetary action and action, that is, there is a relatively long transmission process between the increase of money supply and the general increase of real price. Time lag effect in the field of education, on the one hand, refers to the time delay between receiving innovation and entrepreneurship education and the actual innovation and entrepreneurship, on the other hand, it shows the time delay between policy promulgation and policy implementation. The time lag effect is not only the result difference between the expected effect and the final effect, but also the time gap between the action and the effect.

For expectation theory, due to the existence of time lag, people's prediction based on existing knowledge has a considerable error, and the policy effect sometimes has a lag effect. In the face of a new policy, sometimes the market will be very sensitive, sometimes it will be slow, and the role of the policy may not appear for a while. The implementation delay is the gap between the government's policy decision-making and the policy formulation, implementation and implementation. The way to overcome this delay is to simplify the relevant legislative and administrative procedures. Education itself is a field with a long time lag. The effect of education is reflected in individuals, which needs to be continued from birth to the present. Good education even needs the joint efforts of several generations. In order to avoid the time lag effect of supply side policy as far as possible, the formulation of medium and long-term policy should be stable, and gradually adjust according to the strength of reform, so as to achieve the expected effect of entrepreneurship education, while the short-term policy should be

strong, implemented quickly, and ensure the transparency of the policy as far as possible.

IV. RESEARCH ON THE COUNTERMEASURES OF INNOVATION AND ENTREPRENEURSHIP EDUCATION IN COLLEGES AND UNIVERSITIES UNDER THE SUPPLY SIDE REFORM

4.1 Make clear the goal of education and realize accurate supply

Innovation drive is guided by the ultimate value orientation of innovative creation. It refers to the process that a country or region relies on the re invention and re creation of original knowledge to promote its economic and social progress. The characteristics of innovation drive are the growth, dynamic and habitat of ecosystem after continuous spontaneous evolution. These characteristics make it possible for innovation to be realized under certain social conditions--The outline of national innovation driven development strategy emphasizes that the realization of innovation driven development will be a systematic change, which needs a complete system to build a new development power system and adhere to two wheel drive. The comparison of the traditional method and the proposed method is shown in Figure 3.

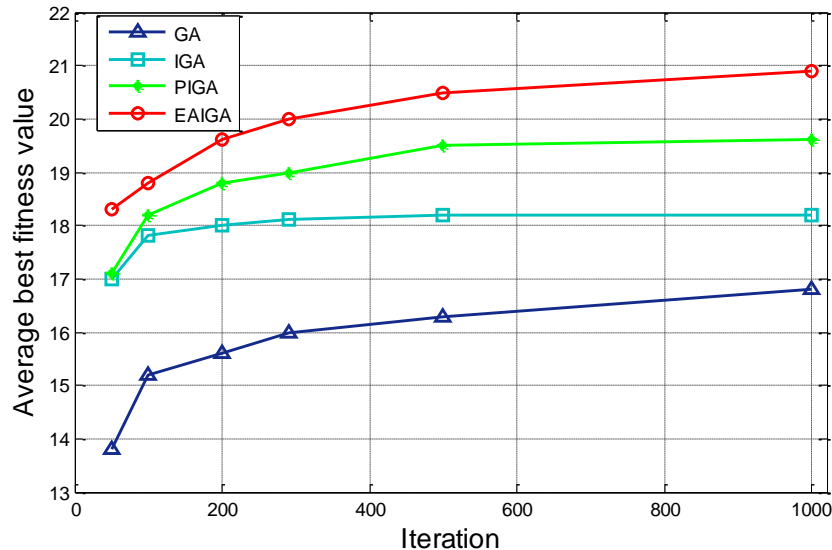


Fig 3: The comparison of the traditional method and the proposed method

The innovation of colleges and universities is to clarify the focus and direction of their own development, strengthen cultural cultivation, strengthen technological research and scientific exploration, adjust the production factors that are not suitable for their own innovation driven development, reform the system and mechanism of colleges and universities, government and

student governance, and finally form a strong system ability of sustainable innovation, and release the innovation vitality to the maximum. Culture cultivation is the internal pulling force of the transformation and development of innovation and entrepreneurship education in Colleges and universities, that is, the innovation and entrepreneurship education in Colleges and universities should first be the education of "innovation and entrepreneurship culture", that is, the organic integration of university culture and entrepreneurship, cultivating each student's innovation and entrepreneurship, and enhancing all members' understanding and cognition of innovation and entrepreneurship in Colleges and universities. The development of innovation and entrepreneurship education is promoted by the influence of cultural factors such as college students' cognition of innovation and entrepreneurship and their behavior patterns. Innovation drive is the external thrust of the transformation and development of innovation and entrepreneurship education in Colleges and universities. It is based on the reproduction and re creation of original knowledge, which makes the development of innovation and entrepreneurship education in Colleges and universities more diversified, integrated and sustainable.

The realization of "accurate supply" of innovation and entrepreneurship education should adhere to the problem orientation, subject collaborative participation, clarify fuzzy cognition, integrate and share resources, improve personnel training, extend education and teaching carrier, and build high-quality teachers. The construction of colleges and universities and the rapid development of students, together with the joint efforts of innovation, give full play to the effectiveness of supply side structural reform, so that the innovation and entrepreneurship education system of colleges and universities can be innovated and developed by leaps and bounds, form a good pattern of system control, system optimization and system innovation, and realize the two wheels of colleges and universities and talents go hand in hand.

4.2 Multiple school running to build a community of innovation and entrepreneurship education and teaching practice

With the development of market economy and the improvement of economic globalization, cultural concepts have also begun to change, and the market has begun to enter the field of people's spiritual life. These changes have triggered the research and development of new products, led to the adjustment of product structure and the change of economic structure. Entrepreneurship requires more and more high-end talents. In order to reduce costs, a large number of enterprises choose to reduce the recruitment and use of new forces while carrying out the macro adjustment of industrial structure, which makes it difficult for a large number of new labor force to find employment. College students use their own advantages to carry out business activities, which often leads to the reform and innovation of social economy and industrial

structure. Data storage flow process is shown in Figure 4.

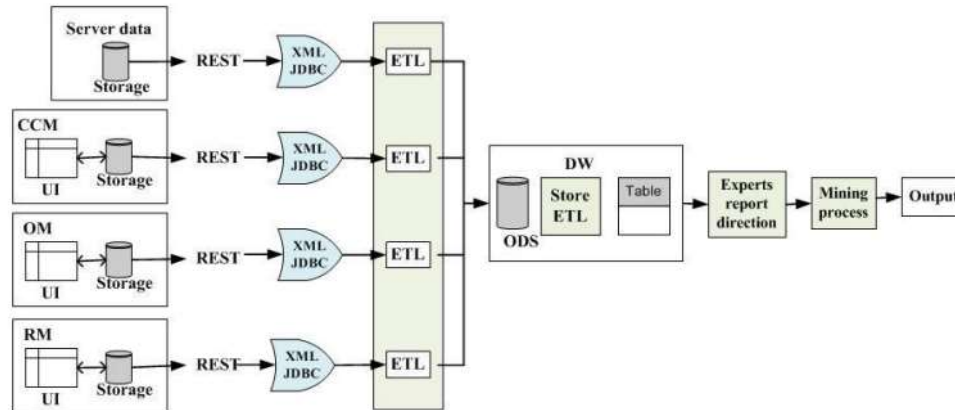


Fig 4: Data storage flow process

We expect that innovation and entrepreneurship education can derive the attitude of open sharing, products with infinite potential and the attitude of being committed to innovation. In the process of innovation and entrepreneurship education in Colleges and universities, we should realize the transformation from the pursuit of the improvement of employment rate to the pursuit of the improvement of employment quality and level, and realize the transformation from simple entrepreneurship practice education to the integration of entrepreneurship practice and professional education. We should take entrepreneurial practice as the carrier, develop the "mass innovation space" in Colleges and universities, cultivate the "entrepreneurial culture" in Colleges and universities, with the guidance and support of policies, take the government as the leading role, combine with regional characteristics, form the entrepreneurial culture of school enterprise integration, and improve the practical ability of College Students' innovation and entrepreneurship.

The theory of market "jungle philosophy" reveals that in order to succeed, we must constantly study, devote ourselves to reality and constantly surpass ourselves. Therefore, frustration education, group communication and team cooperation are compulsory courses for entrepreneurs. Socialized and open education environment needs supporting teaching industry development to provide entrepreneurs with a high matching learning mechanism and specific knowledge system. Regional industrial clusters provide potential entrepreneurs with highly matched specific knowledge system and learning mechanism. Systematic design of practical teaching content, clear instructors for both sides of school and enterprise, precise positioning of talent training objectives, and fine training link setting are the basis of school enterprise cooperation. The diversified integration of teaching and industry will jointly create a teaching

practice community of innovation and entrepreneurship education.

V. CONCLUSION

It is not difficult to find that with the proposal of "mass innovation and mass entrepreneurship", the structural adjustment of colleges and universities is very necessary. In the process of structural adjustment, it is necessary to establish a comprehensive understanding of innovation and entrepreneurship education in the development of colleges and universities. To correctly understand the particularity of innovation and entrepreneurship education and the internal dependence of other related education, we need to improve the innovation and entrepreneurship education theory, curriculum system, teaching staff, policy system, education mode, education effect and other sound system, and we need students, teachers, families, schools and society to clear their own positioning.

Teaching objectives, teaching practice and environment creation are the basic links that must be paid attention to in the process of innovation and entrepreneurship education in Colleges and universities. Under the reform of education supply side, the task objective system has not been established. In view of the overall promotion of "accurate supply", we should actively promote the accurate supply in the process of innovation and entrepreneurship education by shaping the role of students, collaborative innovation between universities and students, and participation of multiple subjects in the construction of the ecosystem. Under the education supply side reform, the whole process of innovation and entrepreneurship education mainly depends on the joint participation of multiple subjects, setting up relevant teaching practice, ultimately creating an innovation and entrepreneurship environment, transforming more innovation and entrepreneurship achievements, and promoting social and economic construction.

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