

## **Training Mode of Innovative and Entrepreneurial Talents in City University from the Perspective of "Regional-Local" Coupling**

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**Abstract:** "Mass Entrepreneurship, innovation" as the country's new normal economic growth power and source, colleges and universities as the main force of talent training, innovation and entrepreneurship is the main position. As a local undergraduate university, innovative and Entrepreneurial Education will be integrated into the construction of urban universities, through adapting to the needs of regional social talents, constantly optimizing talent training programs, and strengthening the top-level system design, deepening the reform of education and teaching, carrying out the work of innovation and entrepreneurship in a down-to-earth manner, carrying out the exploration and practice of innovation and entrepreneurship education, and so on, has received good results.

**Keywords:** Innovation, Entrepreneurship, Personnel Training, local colleges and universities

### **1. Introduction**

The report of the 19th National Congress of the Communist Party of China puts forward that innovation is the first power to lead development and the strategic support to build a modern economic system. The report mentions technology more than 10 times and highlights innovation more than 50 times. By 2035, China's goal of becoming one of the most innovative countries will inspire the whole society to actively implement the strategy of innovation-driven development and Polish the shining business cards created by China and made by China with wisdom. As a local City University, it should follow the tradition, integrate and innovate, establish the orientation of running a school and the goal of training qualified personnel to meet the needs of local economic and social development, and firmly grasp the "root" of locality and the "soul" of innovation We should arm our minds with new ideas to guide our school in its new journey of development, build an applied city university to serve the local economic and social development, give full play to the advantages of local universities, and constantly tamp down the training mode of innovative and entrepreneurial talents in city universities.

### **2.To Adapt to the Needs of Regional Social Talents, and Constantly Optimize the Training Program**

#### **2.1 Timely Revision of Talent Development Programmes**

Following the law of Higher Education Development and talent growth, the university takes the initiative to adapt to the needs of economic and social development, in principle every four years a comprehensive revision of undergraduate talent training program. In 2009,2013, the school has carried out a comprehensive revision of the talent training program. The practice teaching in the 2009 edition of the training program strictly complies with the requirements of the document of the Ministry of Education (No. 2[2007] of the Ministry of Education) , and each practice teaching link credits (hours) , not less than 15% for humanities and social sciences majors and not less than 25% for science and engineering majors. The 2013 version of the training program continues the 2009 version of the basic framework of "platform + module" , independently set up quality development credit module, further highlight quality education and practical education, innovative ideas of talent training. After entering the 13th five-year plan, in 2016, in accordance with the spirit of the guiding opinions of the Ministry of Education, the National Development and Reform Commission and the

Ministry of Finance on guiding the transformation of some local colleges and universities into application-oriented ones, and taking into account the reality of the transformation and development of schools, the undergraduate talent training program has been greatly adjusted to further establish the concept of applied talent training, which aims at post demand, takes high-quality employment as the guidance, takes ability training as the core, and gives consideration to the development of students' personality. Fully involving industry and enterprises in the argumentation and formulation of talent training programs, and constructing an applied undergraduate course system of "course module + Course Group", and set up a certain proportion of credit school-enterprise cooperation courses, school-enterprise joint guidance practice teaching and other links, highlighting the training of students' practical ability, post adaptability and innovative entrepreneurial ability, a four-in-one training system of "knowledge inquiry, ability training, character cultivation and innovation and entrepreneurship education" was set up to fully reflect the needs of industrial enterprises and highlight the characteristics of school-enterprise cooperation in educating people.

## **2.2 Scientific Planning of Specialty Construction**

Focusing on the goal of cultivating high-quality applied talents and facing the needs of local economic and social development, the school has formulated the "Twelfth five-year" and "Thirteenth five-year" discipline and specialty construction plans. During the "Fifteen" period, the school clearly proposed to build professional clusters according to the industrial development layout of Heilongjiang and Harbin, to link up the demand of the industrial chain and the innovation chain, and to give priority to the development of engineering majors. Supporting specialties with distinctive advantages, cultivating emerging interdisciplinary disciplines, reducing specialties that are out of line with the needs of industrial development, and forming a professional system with application-oriented specialties as the main body and basic and emerging specialties as the two wings. The thought of specialty construction to create the advantage of specialty cluster. During the "Fifteen" period, the school achieved a total of 45 professional planning objectives. During the "Fifteen" period, the school will maintain the original number and scale of specialties, carry out comprehensive reform of specialties, vigorously promote the transformation and development of specialties, strengthen the construction of connotation, implement the dynamic adjustment mechanism of specialties, and continuously optimize the layout and structure of specialties. Meet the school's positioning.

## **2.3 Strengthening of the Dynamic Adjustment Mechanism of the Profession**

Following the trend of economic restructuring and industrial transformation and upgrading in Heilongjiang and Harbin, the schools will concentrate their resources on professional clusters to serve the region's leading industries and strategic emerging industries, and actively adapt to the demand for talents from the industries and enterprises. Adjusting the professional layout. On the one hand, we should focus on the whole school's high-quality resources to cultivate the brand specialty, strengthen its characteristics and enhance its core competitiveness; on the other hand, we should adjust, reform or stop enrollment some specialties that can not meet the requirements of economic and social development. In 2016, the school implemented the department reorganization plan, the reorganization resources, the establishment new department. At the same time, history, psychology, physical education, geography and other 10 normal direction of professional enrollment, tourism management, ideological and political education to implement alternate-year enrollment, art major into painting. For the 11 specialties which can be diversified through the mechanism of "large-class enrollment and triage cultivation", we should recruit students according to the specialties and cultivate them according to the "1 + 3" model. With the major of primary education, Visual communication, photography and software engineering as its brands, a multi-disciplinary structure has been formed, with cross-penetration, coordinated development, mutual support and complementary advantages. To meet the industry and regional economic and social development of talent needs.

### **3. Strengthening Top-level System Design and Deepening Education and Teaching Reform**

#### **3.1 Exploring Institutional Innovation Through Pilot Reform**

Through setting up the experimental unit of teaching reform, the school constantly explores the system and mechanism innovation of personnel training. In 2011, the software institute was used as the "experimental area for the reform of the open school-running system and mechanism", and the Engineering Institute was used as the "experimental area for the reform of the cultivation of innovative and pioneering talents". To Visual communication, software engineering as a comprehensive reform of the pilot major, to carry out teaching reform. The Software Institute implements an Independent Secondary College management system. It has established A SCHOOL-ENTERPRISE ALLIANCE COUNCIL JOINTLY WITH IT enterprises such as China Soft International, Shenyang Neusoft, Beijing Shang guan, and Qi'an Science and Technology We will continue to optimize the "three-three-system" diversified teaching staff structure of "career establishment + contract employment + part-time employment". The idea of "331", the train of thought of "306" and the "2 + 1 + 1" training mode of deep cooperation between school and enterprise have been formed. The Software Institute has been approved by the provincial pilot Institute for Comprehensive Reform. The Software Engineering Department has been selected as the provincial key construction discipline, and the Software Engineering Department has been selected as the provincial key specialty for the 12th five-year plan Pilot Project of comprehensive reform of Software Engineering Specialty approved by province. Based on the experimental area, the College of Engineering and technology employs engineering technology experts, production management experts and entrepreneurial elites from the construction industry and electronic information enterprises as part-time professors and visiting professors to serve as mentors for students in innovation and entrepreneurship We will jointly build schools and enterprises, cooperate with education teams, jointly demonstrate the training programs for professional talents, give full play to the advantages of industry engineering experts in innovation and entrepreneurship education, further improve the training mechanism for innovative talents, and jointly train applied technical talents. Visual communication and Harbin Saige Impression Culture Design Co., Ltd. in-depth cooperation, the introduction of enterprises to school cooperation to open a studio, the joint formation of teams for students to build a practice platform, zero-distance understanding of the business environment. Among them, "ice and snow materials 3D printing application technology research" "ice and snow materials 3D printing device system technology development" AND OTHER R & D Projects, R & D funds reached more than 10 million yuan.

#### **3.2 Promoting the Reform of Personnel Training System Systematically**

Starting with the revision of the 2016 undergraduate talent training program, the school has promoted teaching reform in the areas of students' knowledge system, ability training, personality development and Innovation and entrepreneurship. As for the compulsory course of general education, the new practical teaching system of "three unification and four ownership" has been established in the teaching of ideological and political theory, and the "7 + 4 + X" graded and classified teaching system has been implemented in college English classes The college computer class carries out "2 + X" classified teaching, emphasizes the application of information technology. The College Physical Education Class Carries Out "sports club" teaching mode The combination of physical fitness training course + special skills + physical fitness test; the re-establishment of college Chinese course as "quintessence of Chinese Studies", "writing", "classic reading and appreciation", three courses for students of Arts and Sports, according to the demand of mathematics foundation of different specialties, the special teaching of "Subject Foundation + specialty" is carried out. In general education elective courses, from the humanities and social sciences, natural sciences, arts and Sports, three series, it is re-established as eight series: Innovative Spirit and innovative thinking, Chinese and foreign culture and humanistic feelings, economic management and social responsibility, social development and civic education, life concern and artistic aesthetics, dialogue of civilization and International Vision, educational philosophy and

Teacher Development, mathematical foundation and logical criticism, etc. A total of 161 courses make up the general education elective course module. In professional courses, we should break through the original disciplinary framework, focus on the requirements of the economic and social development on the graduates' knowledge, ability and quality, focus on the cultivation of post ability, integrate and match relevant courses, and reasonably reduce the credit of theoretical courses Promoting the transformation from "emphasizing knowledge impartation" to "emphasizing ability cultivation". According to the needs of enterprises in the industry, courses are set up in the specialized courses, and 5%-15% of the total credits are used for the teaching of school-enterprise cooperation, which is better connected with enterprises. In the aspect of personality development, facing to the students' employment and future development, we set up professional development course module to meet the students' individualized needs. On innovation and entrepreneurship education, various activities such as innovation and entrepreneurship training, competition, scientific research projects and social practice are set up to integrate innovation and entrepreneurship education into the whole process of talent cultivation.

### **3.3 Construction of "Five in One" Practical Teaching System**

The school attaches importance to the close connection and organic combination of theory and practice teaching system according to the requirements of the training goal of applied talents, and stresses the cultivation of students' innovative spirit and practical ability The practical teaching links such as experiment, practice, course design, academic year thesis, Social Investigation, Graduation Project (thesis) , Innovation and Entrepreneurship, social practice and extracurricular scientific and technological activities are systematically optimized It has formed a practical teaching system of basic training, professional training, comprehensive training, innovation and Entrepreneurship Training, quality development and the "five in one" in the second classroom. Each specialty divides the talent training goal into the practice teaching each link, from the single to the synthesis, from the verification to the application, from the foundation to the innovation. To realize the goal of cultivating people through practice, which is to coordinate between in-class and out-of-class, between in-school and out-of-school, and to fully combine humanistic quality with professional skills.

### **3.4 Cultivating Students 'Innovative Ability on the Platform of Experimental Teaching**

The school attaches great importance to the opening of laboratories, and has formulated the measures for the administration of the opening laboratory work, and set up special funds for the opening of laboratories, so as to guarantee the opening time, scope and coverage of laboratories in terms of system and funds. Art Training Rooms and university computer basic laboratories are open all day; all basic and specialized laboratories are open regularly according to their tasks and contents; some laboratories use a network-based experimental teaching management system And made the reservation open. We will strengthen the training of students 'innovative ability and quality development, and encourage the development of comprehensive and research-oriented open experimental projects. For example, each article management training room provides the good training condition for the student, satisfies the student to enhance the actual combat ability the desire, the science and Engineering Laboratory carries on the comprehensive opening to the student's graduation thesis, the discipline competition, the innovation start-up project and so on; The Art Laboratory provides the subject comprehensive resources condition, satisfies the student art skill training the demand, causes the student's practical ability and the design ability to be able to enhance. The various forms of the open laboratory have attracted groups and groups of students to enter the laboratory to engage in research and production, and have developed students' innovative consciousness, Spirit and ability. In the 2016-2017 academic year, a total of 75 experimental projects have been opened in the laboratory centre 71,674 students participated in the opening, bringing the total to 163538. In the past three years, students have made great achievements in developing innovative training programs and extracurricular scientific and technological activities in laboratories.

#### **4 . We carried out in a down-to-earth manner work to promote innovation and entrepreneurship, and made good progress in education for Innovation and entrepreneurship**

##### **4.1 Innovative Entrepreneurship education runs through the whole process of personnel training**

In accordance with the directive of the Ministry of Education on vigorously promoting innovation and entrepreneurship education in institutions of higher learning and the work of university students in starting their own businesses, in the revision of the undergraduate talent training program (2013 edition) , the innovation and entrepreneurship education should be included in the talent training plan, and the 8-credit module of Quality Development Credit should be set up to strengthen the cultivation of students' comprehensive quality, practical ability and innovation and entrepreneurship ability It offers two compulsory theoretical courses of "foundation of entrepreneurship" and "career planning" and a practical course of "starting your own business" for 4 credits It also requires all majors to integrate the establishment of innovative and entrepreneurial courses with the professional curriculum system, and to effectively link up innovative and entrepreneurial activities with professional practice teaching A curriculum system of innovative entrepreneurship education combining theory with practice has been initially established. Through the establishment of incentive mechanism to stimulate innovation and entrepreneurship vitality. Every year, the school carries out the evaluation of outstanding teachers and individuals with advanced ethics and ethics. Meanwhile, teachers' guidance of Students 'innovative and entrepreneurial projects and participation in competitions are regarded as important indicators of the evaluation and evaluation of teaching, and are included in the scope of high-level research awards; We will implement the "college students entrepreneurship-leading plan" , set up college students science and Technology Innovation Projects, encourage college students to actively participate in innovation and entrepreneurship practice, improve their ability to combine professional theory with practical projects, and enhance their ability of innovation and entrepreneurship. We will continue to strengthen the practice of double innovation and pay attention to the cultivation of innovation and entrepreneurial ability. The school takes the characteristic application-oriented undergraduate university construction project as the turning point, taking a number of on-campus training centers as platforms, such as provincial experimental and demonstration centers (physics teaching experimental centers and art teaching experimental centers) , innovative and entrepreneurial talents training and practice centers for Civil Engineering Specialty, innovative and applied talents training areas for creative design, and SYB training center of School of Economics and management, etc. We will make full use of the experimental conditions in various open laboratories and basic laboratories, and thoroughly implement the "innovation and Entrepreneurship Training Program for college students. " We will actively guide teachers of various specialties and career guidance teachers to carry out theoretical and case studies on innovative and Entrepreneurial Education. Encouraging all professions to employ entrepreneurs, successful entrepreneurs, experts and scholars from all walks of life as part-time teachers to enter the classroom, social investigation, market research, business visits, professional perception, Quality Development Training and simulated entrepreneurship training have been added to the teaching to enhance students' sense of social responsibility and vocational adaptability Strengthening the targeted training of innovation and entrepreneurship education.

##### **4. 2 Improve the new mechanism to ensure the steady promotion of dual creation of jobs**

One is organization support. The school has set up a "Leading Group on innovation and Entrepreneurship Education for College Students" , which is composed of various departments such as the Academic Affairs Department, the Science and technology department, the enrollment and Employment Department, the Student Affairs Department, and the Youth League committee Participation of deans and heads of related departments. Each two-level college set up innovative Entrepreneurship Education Working Group, responsible for guiding the college students to carry

out innovative entrepreneurship work. In December 2015, the Harbin University was established as a department with an authorized staff of four. In 2016, our university took the lead in setting up the Enterprise Education Alliance of colleges and universities in Harbin, realizing the cooperative development and sharing of the resources of innovation and enterprise education in colleges and universities. Second, the system guarantees. The school regards the establishment of rules and regulations as its primary task. On the basis of learning good policies and learning from experience, and based on its own reality, a series of regulations and documents have been issued, including the implementation plan for further deepening the reform of Education on innovation and entrepreneurship, the measures for the administration of credit for the Quality Development Practice Course for university students, the measures for the administration of university students' school roll, the measures for the administration of university students' innovation and Entrepreneurship Training Program, the measures for the administration of the use of project funds for university students' innovation and Entrepreneurship Training Program, the measures for the administration of university students' Entrepreneurship Park (temporary) , and the agreement on the incubation of university students' Entrepreneurship Park It provides basic compliance and system guarantee for the work of Shuang Chuang. The Temporary Party branch of the pioneering park was set up in June 2017, further promoting the scientific, standardized and orderly development of the work of both pioneering and pioneering work in our school. Since 2012, a total of 134 projects have been approved under the innovation and Entrepreneurship Training Scheme for university students in Heilongjiang, and 130 projects have been approved under school-level construction projects. Third, guarantee of funds. The school invests 600,000 yuan a year for the innovation and Entrepreneurship Education of university students, of which 100,000 yuan is used to support the research of innovation and entrepreneurship projects of university students at provincial and university levels. The fourth is the guarantee of teachers. Invite well-known experts to the school to Carry Out "youth business growth coach" certification training (primary and intermediate level) , set up a team of entrepreneurship training teachers (there are 43 full-time and part-time teachers) , our school Chao Leng teachers selected excellent National Innovation and Entrepreneurship Mentor Library. Five is base security. The Campus Pioneer Park for college students was established in October 2016. In 2017, the total turnover of incubators in the pioneer park reached 7,067,670 yuan. The off-campus campus co-operative business base is the cross-border e-commerce training and incubation base for Harbin University students, which was built in March 2016 in cooperation between the university and the Municipal Committee of the Youth League in Harbin. There are currently six teams registered companies operating It has promoted the development of cross-border e-commerce with Russia in Harbin. Two incubation bases, with a total area of 4261.82 square meters, absorb 32 entrepreneurial teams, 170 college students in incubation platform to carry out innovative entrepreneurial activities.

### **4.3 Effective new practices in innovation and entrepreneurship**

The school takes many measures simultaneously, stimulates the student to participate in the innovation to start an undertaking the practice enthusiasm, enhances the double creativity ability. Held the fifth Harbin Secondary and Higher Education Students Business Plan Competition, two "Clove Cup" Harbin University Students Innovation and Entrepreneurship Competition. Through careful selection and guidance, 55 college students entrepreneurial teams were registered and operated, and 440 people were employed, thus achieving a "zero breakthrough" in college students' entrepreneurship. In the "Construction Bank Cup" Heilongjiang "internet + " University Students Innovation and Entrepreneurship competition, the school entrepreneurial team won a total of three first-class awards, second-class Awards 7, third-class Award 1, the school won the award for Outstanding Organization. Among them, "sailing sand painting: Using a handful of sand to build the flagship of Arts and Culture Marketing" entrepreneurial project won the third China's "Internet + " University Students Innovation and Entrepreneurship Competition Bronze Award. "White Crane in the clouds" , a product of "Harbin Love color-mixing Oil Painting Studio" founded by university students, was selected for the excellent award of "the first Heilongjiang Tourism Art Series

Exhibition" and won the permission to promote the work in the tourism art market of our province; The cultural and creative team of our school won the outstanding exhibition prize at the 2017 China (Shenzhen) International Cultural Industry Fair, which fully demonstrated the outstanding achievements of our school's work. CCTV international channel, Heilongjiang daily, Harbin daily, Heilongjiang Morning News, New Evening News, daily life, northeast network, people's network and other media have repeatedly carried on the special report on the education work of innovation and entrepreneurship in our school. "Harbin LinDong Technology " "micro-wild Culture Media Co. , Ltd. " , an enterprise founded by our college students, has an annual profit of more than one million yuan Typical stories of the two start-ups were reported in the Heilongjiang daily and the Harbin daily. When Governor Hao Lu visited the university, he paid close attention to and praised the innovative and entrepreneurial work of our university students; the Harbin Normal University, Harbin Institute of Physical Education, Harbin Institute of Socialism, Heilongjiang Vocational College of Agricultural Engineering, etc. Many times to our university research work on innovation and entrepreneurship, to give a high evaluation.

## **Conclusion**

"Mass Entrepreneurship, mass innovation" is an important measure to deepen talent training in colleges and universities. It not only meets the needs of the Times, but also meets the individual needs of students. It is a way to enrich the people and strengthen the country. As a local university, we should adhere to the school-running concept of "insisting on integration and symbiosis, establishing city universities and cultivating applied talents" , adhere to the school-running orientation of "local and applied" , base ourselves on Harbin and face the development of regional economy and society, we are committed to cultivating high-quality applied talents who can be used and retained. In the talent training mode, the students' comprehensive quality, practical ability, innovation and entrepreneurship ability, post adaptability, social responsibility and other aspects of clear requirements. In order to improve the entrepreneurial consciousness of students, inspire entrepreneurial thinking, enhance entrepreneurial capacity, entrepreneurial talent to create a solid foundation.

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