Creating New Heights of Printing and Packaging Innovation and Entrepreneurship by Mining Connotation and Characteristics

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Keywords: Innovation, Entrepreneurship, Characteristics, Printing and Packaging, Ideological and Political Education

Abstract. Innovation and entrepreneurship is a powerful new momentum to promote the economic and social development in our country. Chinese universities are carrying out innovation and entrepreneurship education widely. This paper expounded the basic situation of innovation and entrepreneurship in the School of Printing and Packaging Engineering from the construction of management structure, resource construction and the development of practical activities. Next, it summed up the highlights and four characteristics of innovation and entrepreneurship. Finally, it pointed out the future goal and development idea of innovation and entrepreneurship work in School of Printing and Packaging Engineering.

1. Introduction

At the Summer Davos Forum in September 2014, Premier Li Keqiang proposed to set off a new wave of “mass entrepreneurship” and “grassroots entrepreneurship” on 9.6 million square kilometers of land, forming a new situation of “innovation for all”. Since then, he has explained this key word frequently in the first World Internet Conference and related occasions. Almost every time he visits a place, he meets with the local young “creators” to stimulate national entrepreneurship and innovation genes. In 2015, Premier Li Keqiang put forward in the government work report “mass entrepreneurship and innovation” and hoped that people in the process of creating material wealth to achieve spiritual pursuit. On March 02, 2015, the General Office of the State Council issued the Guiding Opinions on Developing Popular Creative Space and Promoting Popular Innovation and Entrepreneurship (No. 9, State Office of the People’s Republic of China, 2015), and deployed to promote popular entrepreneurship and innovation. Up to now, innovation and entrepreneurship have become a prevailing trend throughout the country, and have become a trend of the times, forming a strong new momentum to promote China’s economic and social development.

2. Guiding Ideology

In order to build a general policy support system and promote the chain circulation as capital chain guiding the entrepreneurial innovation chain, the entrepreneurial innovation chain supporting the industrial chain, and the industrial chain driving the employment chain, the State Council issued the “Opinions on Several Policies and Measures to Promote the Innovation of the Mass Entrepreneurship” (National Development [2015] 32) on June 11, 2015. On October 19, the Beijing Municipal People’s Government issued the “Opinions on Implementing Innovation for the Popular Entrepreneurs” to optimize the ecology of innovation and entrepreneurship, and put forward the “Four Efforts” to actively build a policy, institutional environment and public service system conducive to popular entrepreneurship and innovation.

On September 26, 2018, the State Council issued its Opinions on Promoting Innovation and Entrepreneurship with High Quality and Creating an Upgraded Edition of “Double Creation” (No. 32 of Guofa [2018]), emphasizing that under the guidance of Xi Jinping’s thought of socialism with
Chinese characteristics in the new era, adhere to the new development concept, adhere to the supply-side structural reform as the main line, and follow the high quality. Quantity development requires that innovation-driven development strategy be implemented in depth, and the innovation and entrepreneurship pattern that combines online and offline, industry-university-research collaboration, and the integration of large and medium-sized enterprises should be promoted by creating the upgrade version of innovation and entrepreneurship, enhancing the leading role of scientific and technological innovation, and enhancing the service capability of supporting platform.

3. Basic Situation of School of Printing and Packaging Engineering

Under the care of the school leaders and the guidance of relevant innovation and entrepreneurship policies, all the teachers and students in the School of Printing and Packaging Engineering have been actively engaged in exploring and developing innovative and entrepreneurial activities with professional backgrounds in this discipline, based on the scientific and technological frontiers in the development of printing and packaging and polymer materials.

3.1 Establishing a Management Framework to Promote the Education and Teaching on Innovation and Entrepreneurship. On the basis of absorbing and drawing lessons from the management and operation experience of “Printing Engineering Comprehensive Training Center” (City-level Experimental Teaching Demonstration Center), Printing and Packaging Engineering College (hereinafter referred to as “Printing and Packaging College”) established the comprehensive innovation practice base of printing and packaging in 2011, in order to promote the second-level college in the practical training program, city-level University students. Scientific research programs, national innovation and entrepreneurship training programs and various disciplines competitions, and the establishment of a management framework and a number of sub-centers, for the hierarchical, classified education and teaching to create favorable conditions.

In 2013, the Printing and Packaging College set up the Printing and Packaging Virtual Simulation Experimental Teaching Center, which undertakes the extracurricular science and technology innovation and virtual simulation development experiments, and is integrated into the unified management of the printing and packaging comprehensive innovation practice base. After five years of construction and development, the base was successfully selected as the “Beijing Demonstrative School Innovation and Practice Base” in 2016, which has improved its position and broadened its horizons, laid a solid foundation for inter-school exchanges and complementary resources, and further strengthened the demonstration radiation effect of the base. Focusing on the goal of “cultivating innovative talents in printing and packaging engineering”, the base adheres to the principles of “facing industry and paying attention to characteristics; sharing exclusive environment and platform; stressing innovation and project-driven; opening and sharing, and independent management”. By exploring the effective mode of cultivating innovative talents in Colleges and universities, the level of students’ independent practice is established. Taiwan and the long-term mechanism, for the cultivation of students’ independent innovation ability and innovation consciousness, create a good environment and atmosphere.

In January 2018, in order to continue to condense the characteristics, make packaging design and intelligent packaging innovative practice bigger and stronger, Printing and Packaging College introduced enterprise resources under the framework of the comprehensive innovative practice base of printing and packaging, and jointly established the “Packaging Design Center” with Beijing Wushang International Culture Communication Co., Ltd.

3.2 Strengthening Resources Construction to Ensuring Normal Operation of Bases and Teaching Services. Printing and Packaging Comprehensive Innovation Practice Base is mainly concentrated in three areas, teaching D building, teaching E building and research institute, with an area of more than 2500m2, and more than 2300 sets of equipment (pieces) can be used for double-creative teaching activities. It is mainly oriented to printing engineering (state-level characteristic construction specialty, Ministry of Education outstanding engineer education and training program specialty). Beijing first-class specialty, packaging engineering (city-level
characteristic construction specialty, school-level advantage construction specialty), macro-molecule materials and engineering, campus design, digital media technology and other undergraduate specialties to carry out double-creative teaching practice activities and innovative personnel training. The base receives more than 2000 students per year, and the total number of innovative hours is over 60 thousand.

The base is equipped with pre-press graphic design, pre-press graphic information collection and processing, digital media design, color measurement and color management, printing output proofing, printing material suitability testing, paper testing, ink testing, printing electronic material preparation and testing, 3D printing material development and testing, biological printing material development and testing. Testing and packaging decoration design, packaging structure design, packaging materials testing, packaging production, packaging testing, functional packaging materials development, intelligent packaging device development and testing, various types of virtual simulation platform and other equipment resources.

Printing engineering has been successfully selected as the first-class specialty in Beijing. Packaging engineering has been carrying out the construction task of school-level advantage construction specialty for two years. Under the physical space planning and adjustment of the whole printing and packaging institute, the resource construction of the base will be further strengthened, and the ability of serving practical teaching and cultivating creative talents will be greatly improved.

3.3 Innovating Practical Activities to Improve the Quality of Innovative Talents Training. Relying on the innovation base, in the past five years, the printing and packaging academy has continued to develop and participate in the printing skills competition at home and abroad, the packaging design competition at home and abroad, the innovation and entrepreneurship competition of domestic polymer materials and chemical engineering principles, the innovation and entrepreneurship competition of China’s “Internet +” university students, the “Challenge Cup” undergraduate competition, and the “Youth” competition. College Students’ Entrepreneurship Competition and Enterprise Name Competition (such as “Jifeng Cup”, “Lima Dun Cup”, “Tenet Royal Cup”, “Shunfeng Cup”, “Golden Bee Cup”, “Jingdong Logistics Cup”, “Ali Invention Award”) and in-school innovative activities (such as College Students’ Science and Technology Festival, Creative Printing, Basic Packaging Skills Competition, etc.), students’ innovative ideas Knowledge and innovation and entrepreneurship have been greatly improved.

Since 2015, the students of Yinbao College have made outstanding achievements in provincial, ministerial and higher practice activities, and have won 249 awards, including 6 international competitions, 51 national competitions, 192 provincial, ministerial and industrial competitions. Students are responsible for 35 practical training programs, 43 papers published in academic journals at home and abroad, and 12 patents applied for in China.

4. Characteristics and Highlights of Innovation and Entrepreneurship

With the development of innovation and entrepreneurship education and teaching activities, School of Printing and Packaging has gradually formed the following characteristics.

4.1 Enhancing the Practical Ability of Students by Combining the Training Environment with reality. Relying on the comprehensive training center of printing engineering (municipal level), combining with the production process of printing products, modular practice teaching is carried out by means of students’ on-the-job operation; relying on the central financial funds to support the construction of local colleges and universities, the construction of virtual simulation experiment resources continues to be strengthened. The training environment of combining reality with reality has been gradually built up, thus enhancing the practical ability of students.

4.2 Enhancing Students’ Independent Innovation Ability through Scientific Research Practice. Relying on Beijing Printing and Packaging Materials and Technology Laboratory, Beijing Printing and Electronic Engineering Technology Research Center and Beijing Green Printing and
Packaging Industry Technology Research Institute, we have carried out national training programs, Beijing practical training programs and undergraduate scientific research programs. In the academic atmosphere of the instructor’s research group, we have been guided by each other. Gradually enhance students’ ability of independent innovation.

4.3 Cultivating Students’ Entrepreneurial Consciousness through Innovation and Entrepreneurship Activities. Relying on the Municipal University Science and Technology Park/College Students Innovation and Entrepreneurship Park, featuring printing and packaging, it is free to open to the college students’ entrepreneurial team, implements students’ independent management and incubates students’ entrepreneurial enterprises. Allocate a certain amount of funds from the operating funds for students’ activities and incentives to cultivate students’ entrepreneurial awareness.

4.4 Promoting Ideological and Political Education with Innovation Activities and Arousing Students’ Sense of Honor in Loving the School's Love Profession. By participating in various disciplines, science and technology, innovation and entrepreneurship competitions at home and abroad, to cultivate students’ interest in independent learning and sense of teamwork. Integrating ideological and political education into the teaching activities of innovation and entrepreneurship to further stimulate students’ sense of honor and recognition of the printing and packaging industry with outstanding results in the competition.

In the past three to five years of double-creation teaching and guidance work, we deeply feel that only by inheriting printing culture, innovating green digital printing and intelligent packaging, and continuing to adhere to the development of connotation, characteristics and differentiation, can the double-creation work of Printing and Packaging College highlight the highlights and results.

Liu Jiaqi, Qiao Rui and Zhu Xuehui of 15-grade printing engineering majors won the second prize of interactive APP e-book design competition in the 6th National College Digital Art Design Competition; Ye Xinyi and Chen Xiaoqing of 14-grade packaging engineering majors won the “Star of the World Student” prize for the first time, which is the highest prize among the students in this category. Award. At the same time, on the eve of graduation, Ye Xinyi’s “Natural Harbor Art Experience Project” became the incubation project of the North Indian University Innovation and Entrepreneurship Park, and established an independent operating company. On May 25 this year, Ye Xinyi signed a strategic agreement on behalf of the natural harbor and the Daxing Tourism Association at the 5th Daxing Watermelon Creative Food Festival in Beijing to conduct deep resource docking and inject vitality into the tourism development of Daxing District in the future. Only by carrying out double activities that dare to climb the high-end and get ground can the bright spots appear.

5. Future Work Objectives and Development Ideas

5.1 Implementing the “Red and Green Project” to Create a “Double Base” for the Integration of Arts and Industry. “Red and blue” is the three primary colors of printing, and is also the label and characteristic of printing people. By borrowing the concept of “red, green and blue” color, the “red” implies the long-standing Chinese printing civilization and red printing culture, the “green” implies the digital green printing and intelligent green packaging, and the “blue” implies the blue sea strategy, that is, value innovation and new demand creation, is the cornerstone of innovation, entrepreneurship and characteristic development. Therefore, the “Red Green Blue Project” refers to the long-standing Chinese printing civilization and red printing cultural heritage as a mission, the new era of green printing and green packaging development as a carrier, to continue to promote innovation and entrepreneurship education as the goal, to educate people of culture, moral education, innovative consciousness and ability, entrepreneurial thinking and potential. Compound applied talents. Implementing the “red, green and blue” project in Printing and Packaging College is to take the “integration of creative design and craftsmen” as the orientation, rely on the comprehensive innovation and practice base of printing and packaging (municipal level), take the inheritance of Chinese printing civilization and red printing culture as its own responsibility, and
take the implementation of green printing and green packaging development as a breakthrough point to strengthen the top. Layer design, precise implementation, and strive to build a good double-creative base with Indian and Baotou College characteristics, cultivate innovative and entrepreneurial talents with a sense of social responsibility, innovative spirit, practical ability, and both humanistic feelings and international vision.

5.2 Work Objectives and Development Ideas. Printing and Packaging College into the school’s overall double-creative base construction characteristics of the double-creative base is mainly divided into two parts: based on the “creative printing” printing innovation practice and training center, based on creative design training and real-world packaging design center. The College will explore the reform of the talent training program in our college, further study the organic integration of dual-creative education and professional education under the background of new disciplines, face the industry, adhere to the development of connotation and characteristics, highlight morality and cultivate people, and penetrate the cultivation of dual-creative knowledge and ability into talent training. The whole process.

In the “Opinions on Promoting High-quality Development of Innovation and Entrepreneurship to Build Upgraded Edition of Double Creation” issued by the State Council, it is clearly pointed out that scientific researchers should be encouraged and supported to actively engage in scientific and technological entrepreneurship, strengthen the education and training of college students in innovation and entrepreneurship, and continuously promote entrepreneurship to promote the upgrading of employment capacity. This clearly tells us that the double creative work in Colleges and universities should continue to promote, more efforts, more clear direction, more specific goals.

For School of Printing and Packaging, teachers and students should be encouraged to cooperate, school-enterprise cooperation should be encouraged, bold ideas should be pioneered, not only in the teaching and research to actively find the seeds of innovation and entrepreneurship, and unsparingly explore the conditions for the transformation of scientific and technological innovation achievements, so as to make scientific research more valuable and innovation more inexhaustible power. At the same time, secondary colleges should actively cooperate with the Youth League Committee and relevant functional departments under the guidance of the school development ideas, and strive to do a good job in the front, education and training work, supporting relevant policies and measures, escorting teachers and students’ creative activities, and actively incubating characteristic and innovative projects. We should turn the scientific and technological achievements with market value into mature projects, guide them to start their own businesses, upgrade the creative activities in the field of printing and packaging, cultivate talents more closely related to employment, and achieve more full employment.

References

research on the construction of innovation and entrepreneurship base in our country’s university [J].
