Research on Construction of Innovation and Entrepreneurship Education System of Packaging Engineering

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Abstract. The construction of innovation and entrepreneurship education system of packaging engineering is a systematic project. After analyzing the problems and current situation of innovation and entrepreneurship education in Beijing institute of graphic communication (BIGC), it is put forward that the construction of innovation and entrepreneurship education system of packaging engineering in BIGC include atmosphere building, training of teacher, combination of subject and specialty, combination of regional advantages, combination of specialty characteristics, combination of professional education and quality education, combination of curriculum construction and curriculum system, platform construction and other aspects in this paper. The object should train innovative and entrepreneurial packaging talents.

Introduction

The packaging engineering of Beijing institute of graphic communication (BIGC) is specialty major in Beijing city. The specialty of packaging engineering of BIGC is "the combination of packaging technology and intelligent technology" and "the combination of packaging system design and art design". The major highlights the undergraduates’ ability of practice and application. The undergraduates can master professional basic theoretical knowledge and skills of packaging engineering to cultivate strong practical ability and innovative spirit.

At present, China enters the stage of construction of an innovative country along with entering knowledge and information era. Strengthening the ability of innovation and entrepreneurship has become the development direction of China higher education in order to promoting economic development and resolving social contradictions.

So the construction and research of the innovative and entrepreneurship education system of packaging engineering is very important in order to adapt to the development direction of higher education in Chin, to meet the requirements and social needs of the new era, and to carry out the specialty of packaging engineering of BIGC, to train talents with innovative ability and entrepreneurial ability, and to promote the construction of packaging engineering and transformation of talents training mode.

Problems and Realities of Innovation and Entrepreneurship Education

Existence of Problems

Since the promulgation of the Decision of the CPC Central Committee and the State Council on Deepening Educational Reform and Promoting Quality Education in 1996 in China, the concept of "Innovation and Entrepreneurship Education” was put forward, but the innovation and entrepreneurship education remained in the slogan for a long time. Today, though the training of innovative entrepreneurial talents has made significant progress, there are still many problems. The main problems are as follows:
Relatively Low Level of Innovation and Entrepreneurship Education. The undergraduates of packaging engineering in BIGC can participate in various discipline competitions such as packaging creative design contest, which can strengthen the innovation and entrepreneurship education and improve the ability to innovate. However, the works or products of undergraduates only stay in display stage. In other words, it is a display of the platform. These do not meet the requirements to promote the entrepreneurial spirit in China, so the real meaning of innovation and entrepreneurship requirements don’t achieve.

Lack of Innovation and Entrepreneurship Teachers. The professional teachers have the ability of solid theoretical basis and teaching ability and lack the innovation and entrepreneurship experience, so the innovation and entrepreneurship education emphasizes on theory and no effective conduction. Especially in recent years, the new professional teachers of packaging engineering do not have the ability to engage in innovation and entrepreneurship education, and there are no double qualified teachers in packaging engineering. So the innovation and entrepreneurship education of packaging engineering is restricted to develop.

Problems of Innovation and Entrepreneurship Education System. Packaging engineering provides undergraduates with better training programs to help them master more solid knowledge and professional skills in the curriculum system through the real training plan and external plan programs in the professional knowledge and professional skills, and the curriculum design, pre-set internship, graduation design links and so on are set up in the course system to cultivate practical skills and improve the professional ability of undergraduates. However, these cannot meet the requirements of innovation and entrepreneurship education.

Lack of Atmosphere of Innovation and Entrepreneurship Education. Packaging engineering does not form a good atmosphere of innovation and entrepreneurship. Firstly, the innovative learning and entrepreneurship training is not enough attention. Secondly, it is not significant in science and technology innovation and professional characteristics. Thirdly, teachers do not give enough attention in innovation and entrepreneurship education.

Actual Situation

Packaging engineering has a more comprehensive professional training program, so that undergraduates can master more solid professional knowledge and skills. Many discipline competitions are held in packaging engineering of BIGC, such as the packaging creative design contest, the national undergraduate packaging structure design competition and the agricultural packaging design competition.

It is more advantageous of Beijing specialty of packaging engineering of BIGC, the significant professional characteristics of the combination of "packaging technology and intelligent technology" and "packaging system design and art design", the consistence with the design capital of Beijing and cultural and creative industries and packaging design belonging to Beijing high-tech design. There are printing engineering and design art in BIGC, so it is easy to form professional group with packaging engineering.

Some graduates of packaging engineering in BIGC have embarked on the road to entrepreneurship, and some grow senior management of related businesses. They become the model of innovation and entrepreneurship. These provide a favorable support and foundation for the innovation and entrepreneurship education of packaging engineering.

Construction Strategies of Innovation and Entrepreneurship Education

Creating Atmosphere of Innovation and Entrepreneurship Education

The undergraduates’ innovative spirit and entrepreneurial ability is trained from fresh undergraduates to the whole process of graduation design. These include the introduction of professional general education and professional education, and the innovation and entrepreneurship education. Professional teachers have innovative educational philosophy in the teaching process and encourage undergraduates to cultivate the ability of innovation and entrepreneurship.
Outstanding alumni introduced their competition winning works and creative inspiration in the national university undergraduates packaging structure design competition and Naitewang Cup packaging design competition and external training experience and harvest and so on respectively. Outstanding alumni and independent entrepreneurship undergraduates introduced their academic planning and cultivation of innovative entrepreneurial ability, and also gave a presentation of difficulties, chances and apperception.

Training Double Qualified Teachers

Most of teachers do not have the experience of enterprise, so their ability of theoretical education is stronger than the ability of practical education. The teachers are encouraged to carry out practical activities in enterprises in order to improve their practical skills and the ability of combination of theoretical knowledge and production practice. The teachers will be trained as double qualified teachers. The enterprise technician or industry experts are invited to introduce their experience or give lectures in order to improve teachers’ practical experience.

Combination of Innovation and Entrepreneurship Education and Packaging Advantages

There are the first class discipline materials science and technology and a secondary discipline materials processing engineering in BIGC. There are significant advantages in printing and packaging materials and technology research in China. At the same time, the direction of intelligent packaging in packaging engineering in BIGC is set up firstly in packaging education in China, and the combination of packaging technology and intelligent technology is the specialty characteristics of packaging engineering in BIGC. Those not only provide a strong supporting role, but also form characteristics and advantages in innovation and entrepreneurship education of packaging engineering in BIGC.

Combination of Innovation and Entrepreneurship Education and Regional Advantages

Beijing institute of graphic communication is affiliated to Beijing, and Beijing area is already becoming the most dynamic region of design and innovation. Packaging design is high-tech direction and develops vigorously in Beijing. Intellectualization and information is developing also as one of direction in Beijing. Therefore, the unique regional advantages determine the direction and content of innovation and entrepreneurship education of packaging engineering in BIGC.

Combination of Innovation and Entrepreneurship and Specialty Characteristics

Cultivating innovative spirit and entrepreneurial ability of undergraduates should be conformed specialty characteristics of packaging engineering in BIGC closely. Increasing the teaching examples and improving innovation and pertinence of experimental teaching is important in the daily teaching. In the practice training, the ability of innovation and practice of undergraduate should be encouraged and inspired. The innovative education courses are set up, the access to literature, patents and other accessing to information is trained, and the innovative methods and innovative inventions and entrepreneurial success stories should be applied in teaching. Some undergraduates are arranged to do enterprise project. Undergraduates’ innovative spirit and entrepreneurial ability is cultivated by participating in various academic competitions. Further planning and implementation of innovative entrepreneurship competition is not only targeted design of the product packaging, but also promotes commercialization.

Combination of Innovation and Entrepreneurship Education and Professional Education and Quality Education

Packaging Engineering is a multidisciplinary cross application disciplines involving materials, technology, equipment, management, design, marketing and so on. The packaging engineering in BIGC aims to cultivate advanced packaging application talents with solid theoretical knowledge and innovative spirit. Therefore, undergraduates get a lot of professional knowledge while they should have a humanistic quality and comprehensive quality. So it is important to combine innovation and entrepreneurship education and professional education and quality education.
Strengthening Course Construction of Entrepreneurship Education and Perfecting the Curriculum System

Packaging engineering has set up a number of main courses such as packaging materials science, packaging technology, packaging printing technology, packaging structure design, packaging and decoration design, transportation packaging, packaging information detection and processing technology and some elective courses around main courses. The content of these courses and the curriculum system can not meet the requirements of innovation and entrepreneurship. Therefore, the curriculum construction must be strengthened and provide strong support to meet the requirements of innovative entrepreneurship education. Course content need reflect the latest new knowledge. The comprehensive and innovative training courses, the creative innovation and entrepreneurship competition, the school-enterprise cooperation to solve practical problems are increased in the curriculum system.

Setting up Platform of Innovation and Entrepreneurship Education

Many innovative groups around the innovation of materials, technology, structural design, decoration and design and integrated design are guided to form, which can form innovation and entrepreneurship platform. These can help form maker space in the innovation platform on the basis of the formation of maker groups.

Summary

The construction of innovation and entrepreneurship education system of packaging engineering is a systematic project. After analyzing the problems and current situation of innovation and entrepreneurship education in Beijing institute of graphic communication (BIGC), it is put forward that the construction of innovation and entrepreneurship education system of packaging engineering in BIGC include atmosphere building, training of teacher, combination of subject and specialty, combination of regional advantages, combination of specialty characteristics, combination of professional education and quality education, combination of curriculum construction and curriculum system, platform construction and other aspects in this paper. The object should train innovative and entrepreneurial packaging talents.

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