

A CASE STUDY OF ENTREPRENEURIAL UNIVERSITIES WITH CHINESE CHARACTERISTICS

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ABSTRACT:

In china, economic growth and industrial innovation requires closer links between industry and academia. Consequently, more entrepreneurial university have been developed to encourage entrepreneurial ideas and attitudes in students and provide programs to train students in the applications and most advanced practices in knowledge-driven fields. In this article, a case example from Shandong institute of Commerce and Technology is provided to show a successful entrepreneurial transformation of university in china.

Key words: entrepreneurial university china

INTRODUCTION

In the modern society, entrepreneurship is sweeping the world and becomes a driving force for economic growth (Audretsch 2009). To adapt to the external environment, more and more entrepreneurial universities have been developed to encourage collective entrepreneurial actions (Sporn, 2001, Guerrero & Urbano, 2011). The rapid economic growth in China has promoted academic entrepreneurship in universities. Here we choose Shandong institute of Commerce and Technology as an example to provide insights about the transformation process, the technology transfer and the outcomes of entrepreneurial university in developing country. Shandong institute of Commerce and Technology is a business college with a long history, rich culture and innovation. After a long period of exploration and practice, it proposed to create an entrepreneurial university in 2010, which realized the historic leap of business education. In 2013, it was named the Ministry of education as the "top 50 national employment experience." in 2016, it was the top 50 in China, and it continued to compete with Tsinghua University, Peking University and other universities in the "China Internet + student innovation and entrepreneurship competition". It is the only higher vocational college that has won the golden prize in China.

Theoretical framework for entrepreneurial university in China

The modern innovation and entrepreneurship education theory for Shandong institute of Commerce and Technology include one throughout, three integrations, and five paths.

1. One throughout

Innovation and entrepreneurship education of students are the core of school education and are deeply integrated into the school's academic practice and personnel training.

At Shandong institute of Commerce and Technology, innovation and entrepreneurship education is not a simple superposition of innovation and entrepreneurship education, nor is it the icing on the cake of professional education. It is a brand-new educational form to improve the quality of school personnel training via integrating resources. The teaching departments at the college closely combine the characteristics of the disciplines and specialties, and integrate the stimulation of innovation consciousness, the training of innovation thinking and the cultivation of innovation and entrepreneurship into it. In addition, innovation and entrepreneurship education is integrated into every teaching activities.

2. Three integrations

Three integrations refer to the integration in 1) professional education and innovation and entrepreneurship education; 2) comprehensive development and personalized growth; 3) vocational skills and professional spirit.

2.1 Integration of professional education and entrepreneurship education

Shandong institute of Commerce and Technology improves the personnel training system of academic innovation and applied innovation under the framework of classification training, optimizes the strategic layout of personnel training, and rationally determines the educational scale and subject structure.

Shandong institute of Commerce and Technology combines core courses with elective courses to provide knowledge-based entrepreneurship in different professional group. This entrepreneurial university offers appropriate elective courses to students according to professional relevance. Moreover, it constantly develops new curriculum content and practical cases suitable for different student groups.

Shandong institute of Commerce and Technology establishes a mechanism for continuous

improvement of personnel training programs, rationally planning school hours in and out of class, and establishing a curriculum system of four modules, namely, general knowledge, major foundation, professional core and personalization, which integrate innovation and entrepreneurship. Through the construction of general curriculum system and general education under the concept of professional curriculum construction, the entrepreneurial university explores the construction of interdisciplinary curriculum system and build a group of characteristic courses to integrate innovative consciousness, innovative thinking, innovative ability and entrepreneurial practice. Taking the core curriculum construction as the traction, it continuously improves the training program, optimizes the curriculum system, enhances the systematisms and frontier of the curriculum, and improves the quality of the curriculum.

2.2 Integration of all-round development and personalized growth

Shandong institute of Commerce and Technology offers "universal" and "typical" combination of teaching methods.

It provides "entrepreneurship education", "career planning", "employment guidance" and other core courses and network entrepreneurship training courses to all students. In this way, students have a certain sense of innovation and entrepreneurship and grasp the necessary theoretical guidance and basic knowledge for their future investment.

At the same time, it establishes "special zones for training innovative and entrepreneurial talents" to provide a powerful platform for students' individualized growth and entrepreneurial activity.

It sets up "scientific and technological tutors" and "entrepreneurial mentors" composed of backbone teachers, well-known entrepreneurs and outstanding alumni to provide students "one-to-one" guidance on policy interpretation, program planning, technology implementation, market operation and other aspects. In this way, students obtained knowledge in innovation and entrepreneurship practice. Shandong institute of Commerce and Technology also establishes a closed-loop innovation and entrepreneurship education to meet the individual needs of different students for further education or independent entrepreneurship, creating a school-based cultural identity of innovation and entrepreneurship education, and promoting the quality of innovation and entrepreneurship education.

Through several years of practice, innovation and entrepreneurship education model has been constantly innovated and improved, and the integration of general education and professional education has been realized. The scope of innovation and entrepreneurship education has been guaranteed to be fully covered, and 100% of the students have received the cultivation of innovative spirit, entrepreneurial consciousness and innovative and entrepreneurial ability. A large proportion of students and graduates start their own businesses. Students' ability of innovation and entrepreneurship has been greatly improved, and innovation and entrepreneurship activities have been vigorously developed.

2.3 Integration of vocational skills and professional spirit

The cultivation of vocational skills and professional spirit is concomitant, and the cultivation of professional spirit is inseparable from the existing teaching activities of the school. Skills competition, as an important professional teaching practice in vocational education, can not only show and test the effectiveness and level of professional teaching, but also is an important way to cultivate students' vocational skills and professional spirit. Especially through the development of full-staff skills competition, students' vocational skills and professional spirit can be achieved. Our students have won the second "Internet +" National College Students Innovation and Entrepreneurship Competition Gold Award, the fourth National College Mobile Internet Application Development and Innovation Competition Final National Second Prize and so on. In the past four

years, we have won 17 first-class prizes and 14 second-class prizes in the National Vocational College Skills Competition, 21 first-class prizes and 14 second-class prizes in the Shandong Vocational College Skills Competition. Graduates' employment rate and employment quality have been significantly improved, and students' comprehensive quality has been continuously improved. A number of star entrepreneurs such as Dong Dapeng and Liu Xian xu have emerged with outstanding achievements in students' independent undertaking; among them, Ji chuang company, founded by Dapeng Dong, has served hundreds of well-known companies in China by producing and selling robotic chassis products, accounting for more than half of the market share of robotic chassis in the fields of firefighting, police and inspection since 2014. Since its establishment, it has maintained a 2-fold revenue growth every year, reaching tens of millions of yuan last year.

Innovation and entrepreneurship education, for students, mainly lies in the spirit of innovation and entrepreneurship ability training, the purpose is to improve the quality of personnel training; innovation and entrepreneurship education reform, for schools, the key lies in meeting the needs of students' innovation and entrepreneurship, to serve the national innovation-driven development strategy. The reform of innovation and entrepreneurship education in Colleges and universities should be based on the needs of national strategy, draw lessons from the advanced experience of colleges and universities at home and abroad, combine with the school conditions, and devote to exploring a harmonious and open innovation and entrepreneurship ecosystem, and construct a development model suitable for the school's own characteristics and school-based characteristics. The development of innovation and entrepreneurship education has steadily promoted the quality of school employment, and the employment rate ranks among the top universities in the province. The school was awarded the second China's "Internet + student innovation and entrepreneurship" competition, the best driving employment award, the national experience of innovation and entrepreneurship, and the practice of innovation and entrepreneurship base in Colleges and universities. Demonstration and guidance ability has been significantly improved.

3. Five Paths

Shandong institute of Commerce and Technology provides five ways, i.e., optimizing the personnel training program, innovating teaching methods, improving the innovation and entrepreneurship curriculum system, and building a high-level faculty of full-time and part-time combination, to cultivate students' innovative and entrepreneurial abilities. The following sows the specific implementation of the "Five Paths" in core course, accounting, in our school.

Training system of innovation and entrepreneurship education for Accounting Majors

Teaching module		Curriculum	Category	Course / project name	Credit	Subproject name	Subproject credit	Content	Semester
Innovation and entrepreneurship course	Core	Public core course	Core	Innovation and Entrepreneurship	2	*	2	Innovation and entrepreneurship lecture	1-2
		Professional core compulsory course	Core	Corporate tax practice and financial management	>2	*	2	Innovation and entrepreneurship workshop	2-3
	Elective	Public elective course	Professional elective courses	Communication and expression, business culture and literacy, business etiquette, management foundation, personal image design	>2	*	4	Innovation and entrepreneurship lecture	1-4
			Elective	Innovative thinking, enterprise establishment, etc.	>2	*	4	A journey of innovation and Entrepreneurship	1-4
	Elective	Management accounting, business analysis, etc.	>2	*	4	A journey of innovation and Entrepreneurship	3-5		
Innovation and entrepreneurship activities	Second class	Skills Competition	Elective	Professional skills competition	1-8	National competition first award	8	Innovation and creation	Through Whole Process Of personnel training
						National competition second award	6		
						National competition third award	4		
						Provincial competition first award	6		
						Provincial competition second award	4		
						Provincial competition third award	2		
						Ministerial competition first award	6		

						Ministerial competition second award	4				
						Ministerial competition third award	2				
						Department competition the first prize	4				
						Department competition the second prize	2				
						Department competition the third prize	2				
						Winning the school competition	1				
		Technology R & D social services	Elective	Technology research and development	1-5	Participating in national technology research and development	5				
						Participating in provincial technology research and development	3				
						Participate in school level technology research and development	1				
				Social service	1-2	Institute of accounting recognition	1-2				
		The type of thesis and patent	Elective	thesis	1-5	Core journal	5				
						Provincial journal	3				
						patent	4-8	Invention patent	8		
								The utility	6		

						model of software			
						Copyright	4		
Innovation and entrepreneurship practice	Cognition of innovation and Entrepreneurship	Quality evaluation and Career planning	Elective	Recognize your profession and understand yourself.	1-2	Quality evaluation	1	A journey of innovation and Entrepreneurship	Through Whole Process Of personnel training
						Career planning	1		
		Business simulation game	Elective	Recognize business and understand business	1-2	Enterprise cognition	1		
						Enterprise operation physical sand table simulated actual combat	1		
						Physical and electronic simulation of enterprise operation	1		
	Simulation of innovation and Entrepreneurship	Innovation and entrepreneurship simulation training	Elective	Innovation and entrepreneurship simulation training project	1-2	Enterprise establishment	1		
						Consulting service	1		
						Tax Planning	1		
						Acting accounting	1		
		Virtual social business training	Elective	Virtual social business training project	1-2	Training for industrial enterprises	1		
						Training for Business enterprise	1		
	Innovation and Entrepreneurship	type of entrepreneurship	Elective	The real project of school	1-5	Business incubator project	2		
Set up business				1-8	Establish business entities	4			

3.1 Optimizing talent training program

In Shandong institute of Commerce and Technology, the spirit of innovation, entrepreneurial awareness and innovation and entrepreneurship ability have become the important indicators to evaluate the quality of personnel training.

The entrepreneurial university sets up professional teaching quality standards, revises personnel training programs, refines the requirements of innovation and entrepreneurship quality and ability, and adds relevant basic courses and professional courses. In addition, it sets up a reasonable credit system for innovation and entrepreneurship, establishes a credit accumulation and conversion system for innovation and entrepreneurship, explores the ways to convert students' innovative experiments, papers published, patents obtained and independent entrepreneurship into credits, and identifies students' participation in research projects, project experiments and other activities as classroom learning. For those talent students, it offers the training plan of innovation and entrepreneurship ability, establishes the archives and transcripts of innovation and entrepreneurship, and objectively and quantitatively records and evaluates innovation and entrepreneurship activities. Our entrepreneurial university promotes entrepreneurial culture by providing easy major transfer system and flexible educational system. It gives priority to those who participate in innovation and entrepreneurship activities and transfer them to relevant majors. Flexible educational system and relax the length of schooling allow students adjust their academic progress, and retain their status in suspension for innovation and entrepreneurship.

3.2 Innovative teaching methods

Shandong institute of Commerce and Technology adopts a first-class university teaching mode which combines theory teaching with project teaching, case analysis and practice. It encourages project teaching, case teaching, group cooperative learning, and teamwork. It provides an opening, sharing, interaction and cooperation teaching atmosphere to encourage a more fertile entrepreneurial environment for students.

3.3 Improving the innovation and entrepreneurship curriculum system

The entrepreneurial university strengthens innovation and entrepreneurship education by integrating the idea of innovation and entrepreneurship into each course, and establishes the "four in one" innovation and entrepreneurship curriculum module, which is composed of public core courses, professional core courses, public elective courses, professional elective courses and so on. The school offers a gradual and progressive innovation and entrepreneurship curriculum plan to meet different development stage of students. At the same time, it provides inquiry-based small-class teaching, procedural assessment and non-standard vertebral examination in an all-round way. "Five advances" (entering societies, projects, laboratories, enterprises, communities) and "four practices" (experiments, internships, practical training, and social practice) have been effectively applied to stimulate student's entrepreneurial initiatives.

3.4 Strengthening innovation and entrepreneurship practice

Shandong institute of Commerce and Technology successfully build a practical platform to stimulate college students' enthusiasm for innovation and entrepreneurship by creating innovation and entrepreneurship activities module including skills competition, technology research and development, social services, paper patents, skills certificate acquisition, and reading activities. Students are encouraged to participate actively and extensively in the practice

of innovation and entrepreneurship. The entrepreneurial university holds regular competitions of students' innovation and entrepreneurship, advocates the fashion of innovation and entrepreneurship, stimulates the creativity of students, and provides a platform for them to practice their dreams of innovation and entrepreneurship. Innovation and entrepreneurship contest adopts the two-level competition system of preliminary contest and second round contest. The most promising project will be recommended to compete in provincial, municipal and even national contests. The winners can get the support of the special fund of school innovation and entrepreneurship, and can carry out entrepreneurship practice in the cultivation base of innovation and entrepreneurship.

3.5 Creating a high-level faculty team

The entrepreneurial university builds a contingent of tutors in schools for innovation and entrepreneurship, and strengthens the cultivation of existing tutors in the spirit and ability of innovation and entrepreneurship. It also builds a contingent of tutors outside schools for innovation and entrepreneurship, and hire entrepreneurs and senior executives with entrepreneurial experience. Alumni who have successfully started their own businesses, or experts in management consulting, law, marketing and other fields, as well as experts who have rich working experience in the field of innovation and entrepreneurship, are instructors for innovation and entrepreneurship. In this way, it forms a team of tutors both inside and outside the school with innovative and entrepreneurial spirit and practical experience. At present, in-school and out-of-school tutors complement each other, and promote innovation and entrepreneurship education in our school. The entrepreneurial university reforms and improves the performance appraisal system of the faculty. The performance appraisal considers teachers' participation in innovation and entrepreneurship teaching, subject research, special lectures, and entrepreneurship consultation, as well as their guidance in students' entrepreneurship competition activities, mentoring students to set up new enterprises. It promotes the active involvement of faculty students' innovation and entrepreneurship education by award faculties and their teams with outstanding.

CONCLUSION

The development of entrepreneurial universities in china is not only to adapt to the changing market and bring about a new kind of university, but also to train the badly needed talents to meet the needs of economic development in china. The concept of education and the culture based on this is harmony and symbiosis.

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