

How to Construct the Entrepreneurship Education Ecosystem of Universities

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Abstract

Researching entrepreneurship education from the perspective of ecology and constructing an entrepreneurial education ecosystem in colleges are conducive to promoting the healthy, stable and sustainable development of entrepreneurship education. This article reviews the related theories of the entrepreneurial education ecosystem, analyzes the constituent elements of the entrepreneurial education ecosystem, and attempts to construct an entrepreneurial education ecosystem based on the combination of the social environment and the school micro-environment using ecological theories and methods. Running Paths and Methods of Various Elements of University Entrepreneurship Education Ecosystem .

Key words: Entrepreneurship education; Entrepreneurship education ecosystem; University

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Like all the living creatures in nature, entrepreneurial activities also require sunlight, soil, air and water, that is to say, entrepreneurial activities must be carried out through the interaction between the external environment and the internal factor (DUUN Ks,2005). As colleges are the cradle of innovation and entrepreneurial talents, to build the entrepreneurship education ecosystem in colleges from

the perspective of ecology, to focus on entrepreneurship education and to train innovative and entrepreneurial talents fit in with the needs of "the National Outline for Medium and Long-term Education Reform and Development (2010-2020)" and the Ministry of Education's requirements for the conduction of entrepreneurship education. The conduction of entrepreneurship education and the building of an entrepreneurial education ecosystem can help promote the sustainable development of entrepreneurship education in China.

The 18th National Congress of the Communist Party of China has put forward the goal of "the implementation of innovation-driven development strategy and the acceleration of the construction of an innovative country." And the Higher education has also required that "innovation and entrepreneurship education is promoted vigorously in colleges," and encouraged college and university students to become self-employed. As the breeder of new ideas and new technologies, colleges have played an increasingly prominent part in innovation and entrepreneurship. And entrepreneurial universities have become one of the development directions for universities in the future. However, although many colleges in China have accumulated some experience through conducting entrepreneurship education, in general, there is still a lack of a complete and systematic "entrepreneurial education ecosystem". Furthermore, as there are still many problems occurring during the conduction of entrepreneurship education, new ideas are needed for the building "entrepreneurship educational ecosystem" in colleges (Shen, 2013).

1. THE DEFINITION OF "ENTREPRENEURSHIP EDUCATIONAL ECOSYSTEM" IN COLLEGES

Essentially, the entrepreneurial education ecosystem

belongs to the category of ecology as it mainly uses ecological concepts, models, theories and methods to study entrepreneurship education (Zhang, 2012). The entrepreneurship education ecosystem in colleges is to build a space for the existence of entrepreneurship education in college and universities from the perspective of higher education through the interaction between the external environment and the internal factors, with entrepreneurial activities being the center, entrepreneurship education the main line, and the cultivation of entrepreneurial talents the goal. It is to from an ecosystem in which the external environment and the internal factors can depend on each other, condition each other, and develop together.

2. THE FACTORS THAT AFFECT THE ENTREPRENEURIAL EDUCATION ECOSYSTEM

The first factor is the entrepreneurial environment. As the basic condition for the existence of the entrepreneurial education ecosystem, the entrepreneurial environment mainly includes the policy environment, the cultural environment, the economic environment and the physical environment. The policy environment is the guarantee for the development of entrepreneurship education. The cultural environment affects students' passion and enthusiasm for entrepreneurship. The economic environment provides opportunities for entrepreneurship and promotes the carrying out of entrepreneurial activities. The physical environment guarantees that necessary facilities are provided for the conduction of entrepreneurship education.

The second resource for entrepreneurship education. As the essential prerequisite for the conduction of entrepreneurship education, the resources for entrepreneurship education mainly include organizations, curriculum, teachers, student platforms, project libraries, incubation parks, school-enterprise cooperation, and research. Organizations are the leader of entrepreneurship education. Without organizations, entrepreneurship education cannot be conducted systematically. Curriculum system are the core element of entrepreneurship education. As the knowledge reserve for student entrepreneurship, Curriculum system provide students with theoretical guidance. Teachers are the guider of entrepreneurship education, and they guide students' entrepreneurship activities and the conduction of entrepreneurship education. The student platform is an organization for the student to learn, and it can be regarded as the community of entrepreneurship in colleges. The project library is the carrier of student entrepreneurship, and entrepreneurial activities are carried out through these projects. The incubation park is a place for the student to carry out entrepreneurial activities and a space for them to innovate and to start a business. The schoolenterprise cooperation can provide students with advanced experience in enterprise management, entrepreneurial projects and financial support. Research is the backing of entrepreneurship education, and it not only provides a theoretical basis for the carrying out of various entrepreneurial activities, but also tests the feasibility of these activities.

3. THE CONSTRUCTION OF THE ENTREPRENEURSHIP EDUCATION ECOSYSTEM

Like the living creatures in nature, a university's entrepreneurship education ecosystem also needs a healthy ecological environment, so that entrepreneurship education can be conducted effectively and the cultivation of entrepreneurial talents ensured. To study entrepreneurial education issues with ecological theories and methods ensures that the study is supported with sufficient theoretical basis and methods (Zhao, 2013).

Through the theoretical analysis of entrepreneurship education, we believe that the entrepreneurship education ecosystem is an organic whole which is based on the external environment and the internal factors, including Curriculum system, teachers, and entrepreneurial activities. In the entrepreneurship education ecosystem, each factor plays different roles, does its own duty, depends on each other and develop together, thereby maintaining the healthy and orderly development of the entire ecosystem and forming a synergistic development mechanism which spirals upward.

First, Stakeholders

From the perspective of the internal system of the entrepreneurship education ecosystem in colleges, college and university administrators, teachers and students are absolutely the main participators in entrepreneurship education, as they directly participate in entrepreneurship education as "identified stakeholders" who benefit each other and thus progress together. College administrators are the policy-makers of the system and the all users

of stable teaching resources, and therefore they, as the environmental creators, play a positive role in the entrepreneurial education ecosystem. From the outside of the entrepreneurial education ecosystem, the government and enterprises also participate in entrepreneurship education to varying degrees, as they participate in entrepreneurship education indirectly as "undetermined stakeholders". In specific, the government provides policy and financial support, and guides entrepreneurship education; enterprises promote the conduction of entrepreneurial education by providing entrepreneurial projects, industry experience and funding.

Second, Organization

Organizations are often divided into two categories: one is school-level organizations, such as a school's secondary organ which is specially established for entrepreneurship education, and the other is students' association. With the standardized development of entrepreneurship education, many schools have set up a secondary organ to make arrangements for entrepreneurship education and to exercise management functions, so as to better promote the conduction of entrepreneurship education. Students' association is an important component of the entrepreneurial education ecosystem, and students are the subject of entrepreneurial activities. By carrying out various entrepreneurial activities through student's associations, students can make up for the inadequacy of classroom learning and improve their enthusiasm and creativity for entrepreneurship, so as to cultivate good campus culture and promote the spread of entrepreneurial culture.

Third, Culture

Entrepreneurial culture is an important component of campus culture. Campus entrepreneurial culture can promote the conduction of entrepreneurship education, help foster campus entrepreneurship, and help create a campus entrepreneurial atmosphere. The absorbing of the essence of regional culture and the carrying out of campus entrepreneurial culture activities can help raise students' entrepreneurial awareness. A good entrepreneurial culture is an indispensable part of entrepreneurship education and entrepreneurial practice. By serving as the orientation of entrepreneurial value, the orientation of daily entrepreneurial behaviors, and the orientation of entrepreneurial rules and regulations, a good entrepreneurial culture guides students to build entrepreneurial awareness, to foster entrepreneurial interests, and to have entrepreneurial motivation. At the same time, it promotes students to have entrepreneurial social consciousness, risk awareness and a sense of responsibility, so that students will form a sense of social morality, a sense of social responsibility and a sense of social mission. In one word, entrepreneurial culture is the ideological guarantee for the healthy operation of the entrepreneurship education ecosystem in colleges.

Fourth, Resources

Curriculum system, teachers and entrepreneurial activities are the most important resources for entrepreneurship education (Yin, 2012).

Curriculum system are not only the carrier of entrepreneurship education, but also the means to achieve the goal of training entrepreneurial talents. For entrepreneurship education in colleges, the most fundamental problem is the setting of Curriculum system, and for the entrepreneurship education ecosystem in colleges, the core element is Curriculum system. Only by designing a reasonable entrepreneurship education curriculum and building a systematic entrepreneurship education curriculum system, can the effectiveness and efficiency of student learning be ensured. Only by conducting the theoretical and practical teaching of entrepreneurship education, can students' reserve of entrepreneurial knowledge be guaranteed.

The faculty is the guider of entrepreneurship education. Because of entrepreneurship education, new requirements have been put forward for entrepreneurial teachers, who should not only have entrepreneurial knowledge and skills, but also be good at operation, demonstration, innovation and pioneering. In the entrepreneurial education ecosystem, entrepreneurship courses and activities are bound to be completed under the guidance of entrepreneurial teachers. Therefore, building a crossprofessional faculty composed of in-school and out-ofschool teachers is a requirement of the entrepreneurial education ecosystem.

Entrepreneurial activities, as the main line of the entrepreneurial education ecosystem and a useful complement to classroom learning, mainly include competition, projects, incubation, school-enterprise cooperation.

The internal factors of the entrepreneurial education ecosystem interact with each other, condition each other, depend on each other, promote each other, and develop coordinately. The stakeholders provide entrepreneurship education with support in terms of policy and facility, and strongly promote the organizations to give play to their functions in the entrepreneurial education ecosystem. The organizations guide the conduction of entrepreneurship education, help build a harmonious entrepreneurship culture at a school, and help carry out entrepreneurial activities. Because of entrepreneurial culture, the spirit of entrepreneurship can be developed and instilled into students. Entrepreneurial resources not only ensure the development of the entrepreneurship education ecosystem, but also have an influence on entrepreneurial culture.

4. THE ENTREPRENEURSHIP EDUCATION ECOSYSTEM MODEL BUILDING OF HEBEI GEO UNIVERSITY

Entrepreneurship education ecosystem is a living body in the education ecosystem, formed by the school micro environment and the social macro environment. It restricts and controls the entrepreneurship education. Social macro environment includes the government, enterprises and so on, to provide effective supports such as policy guidelines, financial support, industry experience and entrepreneurship programs. The government agency shapes a fair law environment, and a market competition environment through formulating policies that stimulate entrepreneurship to provide policy and fund support and administrative service for entrepreneurship. The school micro environment is the main position of entrepreneurship education as the implementer. Students in the college are the main bodies implementing entrepreneurship education and the main objects testing the performance of entrepreneurship education. The building of entrepreneurship education and the ecology system must be driven by market and grasp the policy in order to deepen the close ties of industry, enterprise, society and school, and promote students to become selfemployed(Liu Linqing,2009).

A perfect ecological environment of education for starting a business is foundational to the success of College Enterprising Education; an effective entrepreneurship education ecosystem should least contain: the microscopic and macroscopic environment of entrepreneurship education, stakeholders, the core factors of education and so on. Based on this, entrepreneurship education ecosystem of Hebei GEO University is structured, as shown in Figure 1.



Figure 1

Ecological system model of entrepreneurship education in Hebei GEO University

Ecology system of entrepreneurship education is an open system, which inputs a variety of resources from the outside, and outputs entrepreneurial talents through the processing of the entrepreneurship education. The external environment for the entrepreneurship education ecosystem of colleges is mainly the policies and resources provided by the government and enterprises. The internal system mainly refers to the interior of the school. The school provides a micro-environment for entrepreneurial education, including the strategies and guidelines of entrepreneurial education, the school cultural atmosphere that encourages innovation and entrepreneurship, the system that motivates teachers and students to innovate and start a business and the matching of relevant resources and so on. Teachers cultivate innovative and entrepreneurial talents through offering entrepreneurial education to students, which includes providing entrepreneurial courses, organizing entrepreneurial activities and giving help in start-up incubating etc., As well as improving the three respects of thinking, knowledge and skills.

The internal factors of the ecosystem of entrepreneurial education interact each other, restrict each other, depend on each other, promote each other, leading to coordinate symbiosis and harmonious development.

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