Abstract:

According to the current situation and existing problems in the innovation and entrepreneurship education in Chinese universities, refer to the theory of survival system model to construct the innovation and entrepreneurship education system in higher institution, and analyze the structure of the innovation and entrepreneurship education system in higher institution in detail, the functions of each constituent system in the system, the intrinsic links and operational mechanisms between each system.

Keywords:

survival system model; higher institution; innovation and entrepreneurship education system

INTRODUCTION

As an important place for talent education in China, Higher Institution should shoulder the important task of cultivating talents for innovation and entrepreneurship. This is not only a requirement of the university’s own responsibilities, but also a requirement for adapting to higher education reform, cultivating high-quality innovative and entrepreneurial talents, or implementing strategically important measures of national innovation-driven development.

In recent years, under the vigorous promotion of the state, universities have continuously strengthened the exploration and practice of innovation and entrepreneurship education, and have made rich research and practical achievements.

However, many higher institutions still have the problem that “innovation and entrepreneurship education is not well understood” and “innovative and entrepreneurial education resources are scattered and it is difficult to integrate”, "imperfect innovation and entrepreneurship curriculum system," "the lack of innovation and entrepreneurship education faculty," and "inadequate development of the campus culture of innovation and entrepreneurship" [1] and an important reason for these problems is the lack of a systematic science theory to guides and references many higher institutions, and an efficient system of
innovation and entrepreneurship education has not yet established. Therefore, it is of great practical significance to study how to construct a scientific and efficient system of innovation and entrepreneurship education.

With regard to the research on the system of innovation and entrepreneurship education in higher institutions, different scholars have different emphasis on the innovation and entrepreneurship education system and built different frameworks of innovation and entrepreneurship education system. However, there is less research on the operational mechanism of the innovation and entrepreneurship education system and the interrelationships among all parts of the system. There is no systematic and detailed description of the innovation and entrepreneurship education system. Therefore, this paper hopes to use the survival system model to study the conceptual framework, internal structure and operating mechanism of the college's innovation and entrepreneurship education system from the system perspective.

1. Overview of the surviving system model

The Viable Systems Model (VSM) is a new model developed by British scholar Stafford Beer in the 1970s using the concept of cybernetics and biology to present the new model that organizational operation of the survival system. This model presents a new model for the operation of survival system. The ability system, from the perspective of the system, to design and diagnosis organization, reflects the organization's general structure, internal connections, operating mechanisms, and interaction with the external environment.

The living system organization is mainly composed of five systems: implementing system, coordinating system, operational control system, development system, policy system. Through the coordination and cooperation among the five systems and between the organization and the external environment, we have built a living system organization with strong adaptability and survivability. Among them, the top three systems are responsible for the implementation of the basic activities within the organization to ensure the internal stability of the organization; the latter two systems are responsible for the formulation of the organization's relevant policies and decisions to ensure the organization's survivability and development direction [2].

VSM provides a completely new way of thinking about systematically studying complex systems. It emphasizes orderly coordination among various systems, and also emphasizes the organization's adaptation and interaction with the external environment. It also builds an internal structure that maintains the viability of complex system organizations. And the operating mechanism has strong superiority and universal applicability [3].

2. The Construction of Innovative and Entrepreneurial Education System in Colleges and Universities

The innovation and entrepreneurship education system in colleges and universities is a complex and open system that integrates multiple elements and subjects. It not only involves the internal academic affairs office, various departments, student departments, Youth League committees and other related departments, but also cooperates with higher institutions’ external innovation and entrepreneurial environment are closely related, and they are important subsystems that play a fundamental and supporting role in the national innovation system. They are in line with the survival system model theory. Therefore, this paper uses the survival system
model to try to build a college education system for innovation and entrepreneurship, as shown in Figure 1.

In terms of organizational structure, the innovation and entrepreneurship education system in universities consists of five systems: the education implementation system of innovation and entrepreneurship, the education coordination system of innovation and entrepreneurship, the education operation control system of innovation and entrepreneurship, the education decision system of innovation and entrepreneurship, and the education policy system of innovation and entrepreneurship.

(1) System 1: The education implementation system of innovation and entrepreneurship, is the implementation carrier of innovation and entrepreneurship education activities in higher institution, including university education departments, colleges and departments, student offices, league committees, and other related units. It is mainly responsible for formulating and optimizing education curriculum systems, the establishment of a team of entrepreneurial faculty, the construction of innovation and entrepreneurship education practice bases, the management of innovation and entrepreneurship activities, and the creation of innovative and entrepreneurial campus atmosphere.

(2) System 2: The education coordination system innovation and entrepreneurship, includes a series of organizational management systems and measures that ensure the consistent action of all execution units in the implementation system, such as the establishment of information sharing mechanisms for innovation and entrepreneurship education, the holding of the Innovation and Entrepreneurship Education Coordination Meeting, etc., through exchanging
information in various implementing agencies to coordinate the activities of innovation and entrepreneurship entities in universities, to achieve complementary advantages.

(3) System 3: The education operation control system of innovation and entrepreneurship, through the coordination system to understand the work of each implementation unit, control the implementation of innovation and entrepreneurship education activities, and provide related services to ensure the stability of the innovation and entrepreneurship education system; at the same time, operation control system is responsible for decomposing the policies and decision-making decisions made in the policy system for innovation and entrepreneurship education, and subdividing it into the objectives of each execution unit. Through the establishment of appropriate assessment mechanisms, the company conducts audits and evaluations of innovation and entrepreneurship education activities to ensure the implementation of education policies and decision-making innovation and entrepreneurship in colleges and universities. Finally, the operational control system is also responsible for the feedback of actual operational information to decision-making systems and policy systems, providing a basis for formulating decisions and policies for innovative entrepreneurship education in universities.

(4) System 4: The education decision system of innovation and entrepreneurship, is mainly responsible for formulating decision making for innovation and entrepreneurship education in colleges and universities based on the external environment and the status quo of innovation and entrepreneurship education in universities, and feedbacks the decision content to the operational control system, and adjusts and controls the implementation of the system's activities. The collected internal and external organizational information and decision-making content are passed to the policy system to support the formulation of innovative entrepreneurship education policies in universities; finally, they are responsible for strengthening contact and cooperation with external environmental entities, including governments at all levels, enterprises, other universities, and related innovations. On the one hand, entrepreneurship organizations and others are better able to collect the latest information on external innovation and entrepreneurship and share the innovation and entrepreneurship education results of colleges and universities with the outside world. On the other hand, they use the resources of external entities to develop innovative entrepreneurship education in colleges and universities.

(5) System 5: The education policy system of innovation and entrepreneurship education policy system, comprehensive analysis of the information provided by the operation control system and decision-making system, formulating the overall policy and strategy for innovation and entrepreneurship education in colleges and universities, and balancing the interaction between the decision-making system and the operation control system, so as to make innovation and entrepreneurship education system in colleges and universities can quickly adapt to changes in the external environment and maintain internal stability.

These five systems are interconnected, orderly, and supportive. They constitute the overall structure of the innovation and entrepreneurship education system in colleges and universities, coupled with the interaction and coordination with the external environment, and jointly reveal the driving force for the development and operational mechanism of innovation and entrepreneurship education systems in higher institution.

On the one hand, the main purpose and task of the innovation and entrepreneurship education system is to formulate a good management decision-making system and efficient operation mechanism for innovative and entrepreneurial education in universities, and to fully
integrate and utilize existing innovation and entrepreneurship education resources to create a high standard education talent team of the innovative and entrepreneurial, built a number of high-quality innovation and entrepreneurship practice platforms and practice bases, and cultivated more outstanding innovative and entrepreneurial talents—this is an important driving force for universities to carry out innovation and entrepreneurship education and promote their own development.

On the other hand, the development of innovative entrepreneurship education in colleges and universities is closely related to the external environment. National policies, enterprise needs, the practice of innovative entrepreneurship education in other colleges and universities, and all kinds of innovative entrepreneurial activities will have an impact on the system of innovative entrepreneurship education in colleges and universities. Together, it constitutes the external driving force to promote the continuous development and optimization of innovative and entrepreneurial education system in colleges and universities. Therefore, we should strengthen the interaction with the external environment and understand the change of the external environment in real time. To establish close cooperative relationship with related innovation and entrepreneurship subjects of colleges and universities, to realize the sharing of internal and external innovative entrepreneurial resources, to optimize the structure of innovative entrepreneurship education system, and to jointly enhance the ability and effect of innovative entrepreneurship education in colleges and universities.

The innovative entrepreneurship education system of colleges and universities based on the survival system model is a complex open system, which is based on the interaction and coordination of each system within the system, as well as the exchange and cooperation of resources with the external environment. It is helpful to improve the education system of innovation and entrepreneurship in colleges and universities, and to improve the ability and effect of innovative entrepreneurship education in colleges and universities.

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References: