

Construction of Innovation and Entrepreneurship Service Evaluation Index System Based on the Triple Helix Theory

Chengqi Shi, Peiyao Zhu

School of Economics and Management, Shaanxi University of Science and Technology, Xi'an, China
Email: peipei19981110@163.com

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Abstract

Based on the triple helix theory, this study analyzes the role positioning of college students' entrepreneurship and innovation service system and the three major service subjects in this system, namely government, universities and enterprises, and constructs the index system framework of "target layer, system layer and index layer", and determines the evaluation field based on goal guidance, process control and result orientation. Based on the principles of scientificity, integrality, objectivity and operability, this paper attempts to make a more sound evaluation from the aspects of knowledge, training practice, performance and environment, to effectively evaluate the development level of college students' innovation and entrepreneurship system, to provide reference for the three major service providers to manage and develop the development, to provide guidance for planning and designing college students' innovation and entrepreneurship environment, and to provide direction for the construction of the whole system.

Keywords

Mass Entrepreneurship and Innovation, Triple Helix, Evaluation Index

1. Introduction

Nowadays, China is implementing an innovation-oriented national strategy, and the trend of innovation and entrepreneurship has already swept the country. "Mass entrepreneurship and innovation" is an important support for the implementation of the innovation-driven development strategy, college students are the main force of innovation and entrepreneurship, and universities are the main position for the training of innovative and entrepreneurial talents (Wang,

2021), and it is of great significance to support college students' innovation and entrepreneurship. However, China's national innovation ecosystem is facing deeper problems, such as the lack of convergent development trend among innovation entities, the lack of interaction and penetration of innovation networks among cooperative entities, the lack of scientific research support and the release of innovation vitality by explaining and integrating education (Xu, 2019), and the lack of communication and collaboration among mass innovation service entities. There are problems such as uneven quality, repeated allocation of resources, inadequate services, lack of effective docking, and lack of continuous attention. Scientific evaluation is the premise and foundation of correct decision-making. At present, it is urgent to deepen the integration and refinement of entrepreneurial services by constructing a multidimensional and comprehensive evaluation index system to achieve orderly and benign development. How to evaluate the mass innovation service system scientifically and objectively is of great significance for comprehensively grasping the current situation, strengthening targeted policy guidance, and better exerting the role of mass innovation service subjects.

2. Theoretical Basis and Literature Review

2.1. Triple Helix Theory

In 1995, Professor Etzkowitz and Professor Leydesdorff of the American Department of Sociology proposed the "triple helix model", which is based on the spiral interaction and innovation relationship among universities, enterprises and governments, and used the principle of the triple helix in biology to try to explain the mutual relationship between innovation subjects and the dynamic mechanism of continuous innovation (Leydesdorff & Rafols, 2011). In the technology transfer network under the triple helix mode, the optimization of the innovation process is the basis of cooperation, and the function of each other is complementary, and then the continuous innovation power is generated (Wang et al., 2022b). This theory holds that the interaction between universities, enterprises and government is the core unit of innovation system and an important factor to promote knowledge dissemination and application, which can effectively promote knowledge absorption, promote the development of national innovation system and accelerate the reform process of higher education. In the process of transforming knowledge into productivity, all participants jointly promote the upward spiral of innovation and promote the realization of the goal of value innovation.

2.2. Research Status of Innovation and Entrepreneurship Service System

College students' entrepreneurship and innovation service system is a system composed of social resources and external policy environment. Since the resources required by college students' entrepreneurship and innovation are multi-faceted, the service system must contain multiple service subjects, which are

generally believed to include government, universities, enterprises, etc., and should assume different roles (Cao, 2021). However, the efficiency and effect of the current mass entrepreneurship and innovation service system are mediocre due to issues such as role cognition differences and interest conflicts among subjects (Wang et al., 2021). Based on the triple helix theory, Wu et al. (2018) constructed a triple helix model of collaborative innovation among multiple entities of “government, industry, university, research and investment” and analyzed the functions of the entities on this basis. From the perspective of knowledge, Qian and Huang (2019) believe that the power struggle, interest struggle and relationship change between government (or state), market (or industry) and academic (or university) are inevitable, and the relationship between the three will eventually become interactive and coordinated. Yang and Wu (2019) established the “triple helix + user” innovation ecosystem model structure diagram that includes main body functions. Through the case study, Ma et al. (2022) found that there are five problems in innovation and entrepreneurship in universities with underdeveloped local economies: the establishment of innovation and entrepreneurship institutions but imperfect operation, insufficient professional staffing, insufficient attention, inadequate understanding, and the influence of government and local support, and put forward corresponding countermeasures and suggestions. Zhu (2016) believes that entrepreneurship education system is a systematic project, which is an organic whole composed of entrepreneurial environment system, entrepreneurial service system, entrepreneurial education system and entrepreneurial platform system. It provides college students with good public opinion guidance, perfect entrepreneurial service and comprehensive entrepreneurial education, so as to provide guarantee for college students’ entrepreneurship. The Global Entrepreneurship Monitor (GEM) research report is committed to studying the entrepreneurial environment in various countries around the world, and has built a relatively complete system of environmental factors. The conceptual model classifies the elements of the entrepreneurial environment into nine aspects—financial support, government policies, government project support, education and training, R & D transfer, business and professional infrastructure, barriers to entry, physical infrastructure, and cultural and social norms.

In terms of evaluation indicators of college students’ entrepreneurship and innovation service system: scholars have systematically analyzed the college students’ entrepreneurship and innovation service system from the aspects of innovation and entrepreneurship education (Harvey, 1986), innovation and entrepreneurship environment (Austin et al., 2006), innovation and entrepreneurship resources (Liu, 2019a), innovation and entrepreneurship platform and etc. A number of systematic evaluation research indicators, such as entrepreneurial consciousness, entrepreneurial spirit, entrepreneurial education, entrepreneurial ability, entrepreneurial environment, resource allocation, and faculty, which take universities as the main body of entrepreneurship and innovation service, are

analyzed, and at the same time, the indispensable position of universities in the service system of college students' entrepreneurship and innovation is highlighted. However, the 21st century is the era of knowledge economy, the main feature of knowledge economy is to rely on knowledge innovation and knowledge dissemination to create value, the development of the country and national rejuvenation rely on innovation to achieve, the resources required for college students' entrepreneurship and innovation are various, college students' entrepreneurship and innovation service system is bound to include multiple service subjects, including the government, colleges and universities, enterprises and even society and natural environmental elements (Chen, 2021) with a further development of triple helix theory. Huang and Wang (2018) outline the changing process from triple helix to quadruple helix. Nevertheless, there are few researches on a comprehensive evaluation index system of college students' entrepreneurship and innovation service from various dimensions based on multiple entrepreneurship and innovation service subjects.

2.3. Conclusions

At present, there are still many problems in the development of the double innovation service system for college students in China, and the triple spiral model derived from the cooperation and innovation of industry, university and research has a good inspiration to solve this problem, which needs to be investigated and designed in combination with the practice of our country and our province. Therefore, based on the triple helix theory, this paper analyzes the role positioning of college students' entrepreneurship and innovation service system and the three major service subjects in the system, namely government, universities and enterprises, and constructs the index system framework of "target layer—system layer—index layer", and determines the evaluation field based on goal guidance, process control and result orientation. It is of great significance to comprehensively grasp the current situation, strengthen policy guidance, deepen integration and refinement, and give full play to the main role of entrepreneurship and innovation services, build a multidimensional and comprehensive entrepreneurial service evaluation system, and achieve orderly and benign development. The conceptual framework is shown in Figure 1.

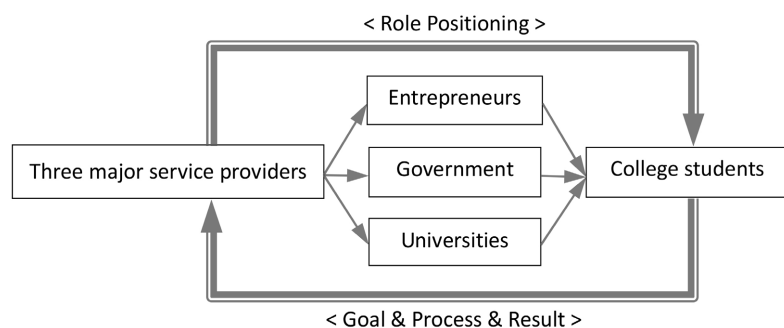


Figure 1. The conceptual framework.

3. Construction of Evaluation Index System of Innovation and Entrepreneurship Service

3.1. Role Positioning of the Three Main Service Providers Based on the Triple Helix Theory

The triple helix is different from the traditional linear model and spiral innovation model. Like the DNA triple helix structure, the three main bodies of universities, enterprises and government are closely connected. These three service entities form a stable triple helix mechanism and generate a strong innovation force in a vector way (Luo, 2021). Freeman, a British educator, believes that universities, enterprises and the government can form a triple spiral innovation and entrepreneurship education through the three forces, which can not only cultivate students' innovation and entrepreneurship ability, but also drive economic and social development on this basis (Li, 2020). Within the whole innovation and entrepreneurship system, universities are the driving force of innovation by cultivating innovative talents for the innovation and entrepreneurship system, while enterprises are the power source of innovation ability and provide attraction for innovation. As an innovation regulator, the government guides the direction of innovation development (Wang et al., 2022a).

From the perspective of triple helix, cultivating talents, conducting scientific research, serving the society, and promoting regional economic development are the main functions of colleges and universities (Chen & Deng, 2014), the value pursuit of "mass innovation and entrepreneurship" education in college talent training, and the significance of building the "mass innovation and entrepreneurship" education model with Chinese characteristics (Jiang, 2021). Among them, serving the society is a sign that universities directly promote the construction of regional innovation system to become the main axis of the social "three spirals" (Chen, 2011). The main function of the government is to organize and coordinate and guarantee the system. Under the premise of market development, it can build a communication bridge for enterprises and universities and share information and elements, which is the environmental guarantee for the construction of innovation field (Liu, 2019b). The main function of an enterprise is to invest capital and channels, realize market gains, help achieve achievements, explore market demand together with universities, introduce products to the market through the first two or three rounds of financing and operation management, and cultivate start-ups to get on the right track and survive and develop in the market (Zhong et al., 2020). The three major service entities cooperate in a pin-two interaction or three-room overlap way, giving birth to mixed organizations similar to innovation and entrepreneurship bases, technology development zones, industrial parks, etc. These organizations have become the most active areas (Ezkowitz, 2017), providing a great impetus for innovation and entrepreneurial activities.

3.2. Construction of Evaluation Index System of the Target Layer

China has repeatedly stressed that it is necessary to take innovation as the orientation, to transform results into guidance, to take platform construction as the basis, and to take competition activities as the carrier, to cultivate college students' innovation and entrepreneurship ability as a breakthrough and an important starting point to promote the comprehensive reform of higher education, and to strive to combine college students' innovation and entrepreneurship with their studies, majors and employment, so as to comprehensively improve their talent training ability of colleges and universities (Wang, 2022). In the college students' entrepreneurship and innovation service system, the three major institutions of entrepreneurship and innovation service, universities, enterprises and the government, have formed a school support system, a social support system and a government support system based on national needs, social needs and the development needs of higher education.

From the systematization and subjectivity of college students' innovation service system, the core goal is to improve college students' ability to know and act on innovation and entrepreneurship, and cultivate talents with basic entrepreneurial quality and pioneering personality. Innovation and entrepreneurship ability is a high-end ability, which is mainly composed of three kinds of abilities: core general ability, discipline knowledge ability and enterprise position ability (Zhang, 2020). The core general ability is the transferable ability that must be possessed in any field of innovation and entrepreneurship, and the ability to quickly analyze and deal with problems. Subject knowledge ability is the comprehensive ability to master, integrate and apply scientific theoretical knowledge. The function ability of an enterprise is the ability to create value directly or indirectly for the enterprise, and it is the embodiment of innovation ability, professional skills and professional quality. The essence of subject knowledge ability and enterprise job ability is the integration of core general ability and the two. The essence of enterprise recruitment is to evaluate these three types of high-end abilities of college students. The more prominent the high-end ability, the greater the employment success rate and the stronger the employability. Therefore, the application of college students' high-end ability, core general ability in practice and enterprise position ability are the most important abilities that need to be strengthened and optimized in the process of innovation and entrepreneurship of college students. It is precisely in the process of participating in innovation and entrepreneurship training projects, innovation and entrepreneurship competitions and entrepreneurial practices that college students can greatly exercise and improve their core general ability and enterprise position ability.

By comprehensively considering process control and result orientation, the objectives of college students' entrepreneurship and innovation service system construction of the target layer are decomposed into four aspects: innovation and entrepreneurship knowledge, innovation and entrepreneurship training practice, innovation and entrepreneurship performance and innovation and en-

trepreneurship environment, which together constitute the target layer of college students' entrepreneurship and innovation service system, as shown in **Figure 2**.

3.3. Construction of Evaluation Index System of the System and Index Layer

The college students' entrepreneurship and innovation service system is composed of multiple internal subsystems, including multiple entrepreneurship and innovation service subjects, which form an organic linkage between each subsystem and the entrepreneurship and innovation service subject to ensure the overall benign operation. College students' entrepreneurship and innovation service system is a large system composed of multiple subsystems with universities, governments, enterprises, society and families as the main body, each subsystem has its own specific elements, and the ultimate function of each subsystem and each element is to provide quality services for college students' innovation and entrepreneurship, achieving the overall goal of ensuring the smooth development of college students' entrepreneurship and innovation practice. This section analyzes the system layer and index layer under each target layer based on the four above and shown in **Table 1**.

3.3.1. Innovation and Entrepreneurship Knowledge

As the main front for cultivating innovative talents, colleges and universities are the main driving force in the triple helix structure and play a crucial role in cultivating college students' knowledge ability of innovation and entrepreneurship (Luan & Xue, 2022), mainly in the following two aspects: First, pay attention to teaching and training, the development of three-dimensional curriculum system.

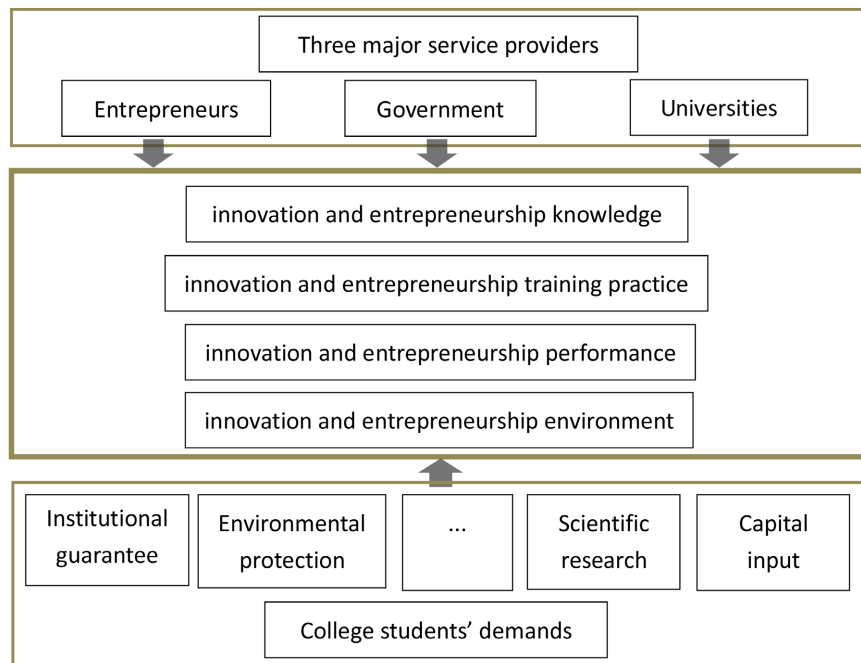


Figure 2. The target layer based on triple helix theory and college students demands.

Table 1. Evaluation index system of innovation and entrepreneurship service system.

Target layer	System layer	Index layer	Specific measurement	W_i	Weight	
Innovation & entrepreneurship knowledge O1 (0.1432)	Teaching training S1 (0.08)	Teaching course OS11	The establishment and coverage of the curriculum system of mass entrepreneurship and innovation	0.1198	0.0172	
			The implementation of practice improvement courses	0.1590	0.0228	
			The degree of integration of innovation and entrepreneurship education and professional education	0.1198	0.0172	
		Teaching mode OS12	Classroom training mode(evaluation of contribution to high-quality mass entrepreneurship education)	0.1590	0.0228	
			Teaching quality OS21	Evaluation of the theoretical and practical level of entrepreneurship and innovation of college tutors (evaluation of scientific research achievements, project achievements, entrepreneurial experience, etc.)	0.1198	0.0172
				Evaluation of the teaching and guidance level of innovation tutors	0.1590	0.0228
	Teaching staff S2 (0.0634)	Team structure OS22	The percentage of teachers with entrepreneurship and innovation experience account for about all teachers	0.0817	0.0117	
			The percentage of entrepreneurial tutors outside the school account for about the total faculty	0.0817	0.0117	
		Innovation & entrepreneurship competition S1 (0.1874)	Project evaluation OS31	Project innovation level	0.3526	0.0661
				Project research significance (in line with market demand and enterprise demand, Whether it can solve practical social problems)	0.2008	0.0376
			Project support OS32	Project guidance (difficulty solving, process guidance, professional training, policy interpretation direction)	0.1436	0.0269
				Financial support (government guidance, enterprise support)	0.2250	0.0422
Innovation & entrepreneurship training practice O2 (0.4821)	Innovation & entrepreneurship platform S2 (0.6087)	Service capability OS41	Basic support (equipment/site, materials and other aspects of support)	0.0780	0.0146	
			Platform government participation	0.1822	0.0537	
		Platform enterprise participation	0.1549	0.0456		
		platform resource integration ability (timely collect national, regional and industry needs, accurately push industry and market trends and policies;)	0.1367	0.0403		
		Platform service subjects' comprehensive quality of entrepreneurship and innovation (knowledge structure, industry background, business skills, etc.)	0.1005	0.0296		
		Channels and means and digitalization level to carry out entrepreneurship and innovation services	0.1185	0.3490		
		Platform infrastructure construction level (entrepreneurship laboratory, engineering training center and various types of experimental equipment, etc.)	0.0968	0.0285		

Continued

Innovation & entrepreneurship environment O3 (0.1874)	Service performance OS42		Number of college students	0.0705	0.0208	
			Frequency of entrepreneurship and innovation activities	0.0768	0.0226	
			Innovation service characteristic level	0.0632	0.0186	
	Double creative atmosphere S5 (0.1373)	Education environment OS51		College innovation and entrepreneurship consciousness cultivation, innovation concept training	0.1329	0.0249
				Efforts made by universities to publicize the cause of mass entrepreneurship in colleges and universities	0.1645	0.0308
		Public opinion leads OS52		Sense of social identity to innovation and entrepreneurship activities	0.1968	0.0369
			Efforts made by government to guide college students to start businesses	0.0981	0.0184	
			Efforts made by enterprise to guide students to innovate and start Businesses (Double Entrepreneurship Support Fund)	0.1402	0.0263	
	Safeguard mechanism S6 (0.0316)	Legal protection OS61		The level of legal protection for students' rights and interests in innovation and entrepreneurship	0.0929	0.0174
				Assistance mechanism (entrepreneurial risk subsidies, commercial insurance premium subsidies, etc.)	0.0760	0.0142
Support policy S7 (0.0184)		Financial support for OS71		Financial support policy to help college students venture financing (platform investment, enterprise investment, angel capital, etc.)	0.0364	0.0068
	Fiscal support OS72		Fiscal and tax support policy for mass entrepreneurship and innovation (tax and fee reduction policies)	0.0621	0.0116	
Innovation & entrepreneurship performance O4 (0.1874)	Results Evaluation S9 (0.1289)		The increase of college students' enthusiasm for entrepreneurship and innovation through the experience of entrepreneurship and innovation	0.1500	0.0281	
		Project Result OS91		Number of high-level competition awards or ranking level through the experience of entrepreneurship and innovation	0.2432	0.0456
				Future development prospects of mass innovation projects (results conversion, commercialization, etc.)	0.2944	0.0552
	Performance Output S10 (0.0585)	Personal Achievement OS101		Number of papers and patents published	0.2012	0.0377
			Social recognition, such as public coverage, job hunting favor, etc.	0.1112	0.0208	

Existing studies have revealed the interactive relationship between entrepreneurship and innovation education and classroom teaching. The classroom revolution in colleges and universities provides necessary support for the high-quality development of entrepreneurship and innovation education, and

the teaching reform oriented by autonomy, inquiry, cooperation and practice forms the conditions for the realization of entrepreneurship and innovation education (Lei, 2022). On the basis of attaching importance to the construction of mass innovation and innovation courses, colleges and universities should build a multi-level and systematic mass innovation and innovation course system, which is closely combined with general education courses, specialized courses and innovation and entrepreneurship courses. They should pay attention to practice, and adjust personnel training plans and schemes at all times according to national policies. Curriculum content should meet the needs of hierarchical training of innovative thinking, innovative spirit and entrepreneurial practical ability to build the “specialized innovation” integration curriculum (Lei, 2022), that is, to realize the integration of entrepreneurship and innovation education and professional education, and pay attention to both the cultivation of professional technical knowledge in professional education and the integration of entrepreneurship and innovation education, Innovation of training model and arrangement of entrepreneurship mentors to hold entrepreneurship lectures on campus to interpret entrepreneurship policies and share experience and give practical guidance. The second is the construction of teaching staff of entrepreneurship and innovation education (Jiang, 2021), strengthening the training of teachers’ entrepreneurship and innovation ability (Liu & Lin, 2021) and school-enterprise cooperation, actively citing enterprise elements, hiring well-known entrepreneurs and other outstanding talents in various industries, focusing on the practical experience and entrepreneurial experience of teaching staffs, and constantly injecting fresh force into teachers team.

3.3.2. Innovation and Entrepreneurship Training Practice

College students’ innovation and entrepreneurship practice is a key part of cultivating college students’ innovation and entrepreneurship ability. The innovation and entrepreneurship practice system in colleges and universities is dominated by college students’ innovation and entrepreneurship projects and various innovation and entrepreneurship discipline competitions, which is an important embodiment of college students’ innovation and entrepreneurship practice (Song & Wang, 2021), and the innovation and entrepreneurship platform is a powerful carrier of China’s independent innovation and an important part of the college students’ double innovation system.

In the College Students’ Innovation and Entrepreneurship Competition, students adhere to government guidance, public welfare support and industry enterprises support to deepen cooperation in the event, and broaden the financing channels for the event. Various aspects such as preliminary team formation, idea generation, project investigation, project design, preparation and implementation, research report and plan writing, marketing strategy and strategy are all tests of college students’ innovation and entrepreneurship practice ability. In the whole process, the two main bodies of universities and enterprises cooperate to

provide data such as enterprise demand, market demand, historical creative database and industry development report to enhance project feasibility and innovation, set up relevant training courses to fill the gap of professional knowledge for students to write plans, preventing creativity from deviating from social and market demand. Forum and professional mentor guidance can be provided for help to overcome technical difficulties. Current scholars propose that while encouraging college students to actively participate in the number of innovation and entrepreneurship competition projects to meet, mid-term assessment should also be set up to pay attention to project process management to improve project quality, insisting on promoting teaching, learning and innovation through competition.

The construction subjects of college students' innovation and entrepreneurship service platforms are different. College innovation and entrepreneurship platforms, school-enterprise joint construction of innovation and entrepreneurship platforms, school-school joint construction of innovation and entrepreneurship platforms, etc., such as college students' double innovation practice base, maker space, industrial park, science park, incubation base, etc., effectively unify the common goals and value orientation of the three main bodies to a certain extent. With the support of government policies, some universities have made great achievements. For example, the establishment of the National University Science Park in Xi'an Jiaotong University makes good use of the triple helix theme model to form a triple helix main body integration construction highland. From the perspective of college students' innovation and entrepreneurship, the evaluation factors of innovation and entrepreneurship platform construction can be divided into the following two aspects: One is the service capacity of the innovation and entrepreneurship Platform. The innovation and entrepreneurship platform should timely collect effective information such as innovation and entrepreneurship assistance policies, industrial incentive policies, and national innovation and entrepreneurship education high-quality resources, strengthen the integration of information resources, and do a good job in national and local policy issuance and interpretation. What's more it also have to collect national, regional and industry needs promptly, do a good job of policy publicity, accurately push industry and market trends and other information for college students, and promote college students to make full use of tax reduction, enterprise registration and other support policies. The comprehensive innovation and entrepreneurship service quality of the main person in charge of the innovation and entrepreneurship platform and the team, that is, the comprehensive innovation and entrepreneurship quality of the person in charge and the team, such as knowledge structure, industry background, business skills, the construction environment of the innovation and entrepreneurship platform and the means for the innovation and entrepreneurship activities implementation are also important indicators for assessing the construction of the innovation and entrepreneurship platform (Liu et al., 2020). The other is the service per-

formance of the innovation and entrepreneurship platform. It includes the frequency of roadshows, salons, competitions and other exchange activities related to innovation and entrepreneurship theme held by the innovation and entrepreneurship platform, the number of college students serving innovation and entrepreneurship, and the professional direction, operation mode and characteristics of innovation and entrepreneurship service focusing on innovation and entrepreneurship service, that is, whether the platform focuses on specific innovation and entrepreneurship technology fields or specific innovation and entrepreneurship groups to provide specialized innovation and entrepreneurship services, and whether it has distinct characteristics and a model that can be promoted in terms of operation mode and subdivision innovation and entrepreneurship services.

3.3.3. Innovation and Entrepreneurship Environment

Promoting college students' innovation and entrepreneurship requires a good entrepreneurial atmosphere, guiding public opinion and providing innovation support to students (Hu, 2020). To build an innovative and entrepreneurial environment for college students, colleges and universities should first establish innovative ideas and awareness (Jiao & Fan, 2022), change the thinking mode of teachers and students, and create a strong atmosphere of double innovation through the combination of online and offline means such as broadcasting, publicity bar, WeChat public account and campus publicity APP (Yang, 2021). In setting up the assessment content related to innovation and entrepreneurship, attention should also be paid to the infrastructure construction of colleges and universities and the resources required for research and development equipment, so as to provide conditions for college students to innovate and start businesses, enhance their enthusiasm for innovation and entrepreneurship, and achieve mass entrepreneurship and innovation among college students. A good environment for innovation can not only stimulate college students' interest in innovation, but also reduce their burden. Therefore, the three major service bodies should create a public opinion environment, actively publicize through the Internet, popularize knowledge related to innovation and entrepreneurship, improve the social identity of college students' innovation and entrepreneurship, and establish offline and online institutions to launch entrepreneurial training services to provide support for college students' entrepreneurship. Enterprises should also play a role in strengthening cooperation with colleges and universities, establishing entrepreneurship support funds in schools, carrying out "revealing and taking charge", and sharing excellent entrepreneurship cases with students, enhancing students' entrepreneurial confidence, and providing a practice base for colleges and universities to cultivate new talents (Mu, 2019).

The government is the leader in promoting students' innovation and entrepreneurship. It should play a guiding role, improve entrepreneurship laws, and provide students with support and guarantee for entrepreneurship. In the

process of innovation and entrepreneurship, students mainly face the problem of funds. Therefore, in terms of policy formulation, the government improves the financing policy and provides free incubation space and rent subsidies. For example, the government implements the policy of tax reduction and fee reduction, and sets up accurate and effective relief for entrepreneurship risks to reduce the worries of college students and adopts entrepreneurial risk subsidies, commercial insurance premium subsidies and other ways, implements financial and tax support policies for college students' innovation and entrepreneurship, and financial policy support for college students' innovation and entrepreneurship and encourages financial institutions to provide financial services to college students' entrepreneurial projects in accordance with the principles of marketization and commercial sustainability, solving the financing problems of college students' entrepreneurial projects. The government is supposed to guide innovation and entrepreneurship platform investment funds and social capital to participate in the early investment and investment of college students' entrepreneurial projects. In addition, it is necessary to improve the education system. First of all, let colleges and universities incorporate innovation and entrepreneurship education into the key links, make an increase in the special funding support of the central college education and teaching reform, and encourage more college students to start businesses (Wei et al., 2017). Finally, relevant laws should be implemented to elevate college students' innovation and entrepreneurship to the legal level and protect their innovation interests (Huang, 2021). The government leads relevant departments to urge the implementation of policies to support college students' innovation and entrepreneurship, strengthen organizational leadership, gain an in-depth understanding of the situation, optimize the environment for innovation and entrepreneurship, actively study, formulate and implement policies and measures to support college students' innovation and entrepreneurship, and timely help college students solve practical problems.

3.3.4. Innovation and Entrepreneurship Performance

Existing scholars have proposed that while encouraging college students to actively participate in innovation and entrepreneurship competition projects and other practical training activities to meet a certain number, we should also pay attention to the long-term development results of the project, and the quality of the project is the key to whether the project can be implemented and whether the results can be transformed (Zhang, 2021). The transformation of innovation and entrepreneurship results is to transform innovation and entrepreneurship results from ideas into reality, from theory to practice, give play to the role of innovation and entrepreneurship, leading entrepreneurship with innovation, promoting employment, and supporting college graduates to find more full and high-quality employment. The transformation of innovation and entrepreneurship results has far-reaching strategic significance and important practical role

for individuals, society and even the whole country.

4. Evaluation Method and Determination of Index Weight

After the completion of the conceptual framework of this study, based on the review of relevant policy documents and combined with the results of literature analysis, field research and interview content, the initial index is established around the innovation and entrepreneurship service system that has both qualitative index and quantitative index. The combination of both of them is conducive to a more comprehensive and accurate reflection of the operational level of innovation and entrepreneurship service system of college students in different regions, playing an evaluation guiding role, and guiding the construction and development of innovation system of college students in the direction of institutionalization and standardization. Finally, an evaluation index system of college students' innovation and entrepreneurship services is constructed, which includes 4 first-level indicators, 9 second-level indicators and 36 third-level indicators. These four systems in the target layer not only have independence, but are also related to each other, which makes the evaluation of innovation and entrepreneurship service system have the characteristics of in unity, hierarchical difference and fuzziness. Analytic hierarchy process (AHP) can help us to separate different levels of systems, analyze the problems of each level separately and compare with each other, reducing the uncertainty and fuzziness of the analysis results. By constructing a judgment matrix, experts are invited to assign values to the matrix indicators according to the importance of the indicators, and evaluate the importance of each evaluation index for the operation of college students' innovation and entrepreneurship service system, so as to determine the weight of each index. The eigenvector W and the maximum eigenroot λ_{\max} are calculated for each judgment matrix, and the consistency (consistency ratio: $CR < 0.1$). The specific weight calculation results are shown in **Table 1**.

Based on the constructed evaluation index system of college students' innovation and entrepreneurship service and the weights of each index, the quantitative evaluation of innovation and entrepreneurship service system can be realized. The way of evaluation can be carried out by questionnaires according to the evaluation level to complete the evaluation of innovation and entrepreneurship service system. The evaluation level can be divided differently into quantity, names and assigned values according to the evaluation content. By using the fuzzy comprehensive evaluation method of analytic hierarchy process, the comprehensive evaluation result of students' double innovation service system can be made by importing the evaluation form of the finished grade into the evaluation system. The overall score can be obtained by assigning the evaluation level according to certain need.

5. Suggestions and Implications

In order to promote a better development and integration of innovation and en-

trepreneurship and ensure that government, enterprises and universities play their due roles and achieve established benefits, the following suggestions are put forward:

Innovation and entrepreneurship training practice plays a dominant role in the evaluation system, which provides students plenty of opportunities to improve personal comprehensive abilities through innovation and entrepreneurship experience from competition and platform. Government and enterprise, in particular, have to devote themselves to college students' innovation and entrepreneurship training practice both in depth and breadth, further stimulating the vitality of innovation and entrepreneurship among students.

The three main entities of the triple helix model, universities, enterprises and government, cooperate and interact closely in the innovation process while maintaining their own independent identity. Each of the three main entities will exhibit some of the capabilities of the other two, but at the same time retain their original role and unique identity. The system layers corresponding to the above four target layers are mutually complementary and inseparable. In the three-spiral interaction strategy, any party should make full use of its own favorable factors, take the initiative to attack on the basis of mutual assistance, and actively act as the main force. To this end, the government should conduct more research and learn from, do a good job of top-level design, continue to improve the system supply, rely on government projects, provide necessary resources and platforms for universities and enterprises, and timely follow up, feedback and coordination of cooperation. Universities and enterprises should change the concept of effective cooperation in a timely manner, take the initiative to seek assistance, and with the support of government policies, strive to practice the concept of three-spiral main body cooperation, so as to create favorable conditions for ensuring that the project takes root.

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Conflicts of Interest

The authors declare no conflicts of interest.

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