

Current Situation and Path Optimization of College Students' Innovation and Entrepreneurship under the Background of "Internet Plus"

Yangzi Dong, You Zhang

Hebei GEO University, Shijiazhuang, Hebei, 050031, China

Keywords: College Students, Internet Plus, Entrepreneurship and Innovation, Entrepreneurship Path Optimization

Abstract: With the integration of the awareness of "Internet plus" ("Internet+") into people's lives, the era of "Internet plus" has come. From the perspective of "Internet plus", starting with the opportunities and challenges of college students' innovation and entrepreneurship, this paper proposes an optimization path to solve practical problems. This paper probes into the current situation and path optimization of college students' innovation and entrepreneurship under the background of "Internet plus", expounds the research on the current situation of college students' entrepreneurship mode under the background of "Internet plus", finds the problems existing in college students' innovation and entrepreneurship under the background of "Internet plus", and puts forward the path optimization of college students' innovation and entrepreneurship under the background of "Internet plus". After optimizing the innovation and entrepreneurship path for college students, their cognitive ability, innovation ability, and innovation literacy continue to improve over time. Throughout the entire process, their cognitive ability has increased by 0.17; their innovation ability has increased by 0.20; their innovation literacy has increased by 0.17. After optimizing the innovation and entrepreneurship path, it can help students combine theory with practice, improve their practical ability and comprehensive quality, and also cultivate their thinking ability, laying a better foundation for college students' entrepreneurship.

1. Introduction

"Internet plus" refers to the spread and application of Internet based information technology to various fields of social life and economy, including big data, cloud computing, mobile Internet and other information technologies. The essence of "Internet plus" is to digitize and network traditional industries. It is characterized by respect for human nature, innovation driven, cross-border integration, open ecology, etc. It is an innovation and upgrading of traditional industries. The advent of the "Internet plus" generation has not only brought opportunities to the e-commerce industry, but also created a good platform for college students to start businesses, which has greatly mobilized their entrepreneurial enthusiasm.

The entrepreneurial model is a reasonable allocation of various entrepreneurial factors, and the

college student entrepreneurial model is a unity of various entrepreneurial factors. A Ghafar believed that exploring and understanding skills has largely become a component of entrepreneurship education, with the aim of cultivating graduates who are not only primarily dedicated to entrepreneurship, but also empowered and able to create entrepreneurial influence within the organization. This provided a way to further develop entrepreneurship education, especially integrating skills [1]. Gabriel Linton believed that learning from the "penetration" method can be realized by using design thinking and methods. It emphasizes how to use design thinking to realize methods and entrepreneurship education with "penetration" perspective [2]. To evaluate entrepreneurship education in universities, monitor its implementation, and offer insightful feedback to support the integrity of the innovation and entrepreneurship education system, Ben Niu proposed a comprehensive and effective evaluation system [3]. Inese Mavlutova found that the research on how the digital transformation based on the application of digital technology affects the sustainable development of each economy has increased [4]. Gustav H. discussed the concept of experience used in educational research and learning activities to promote knowledge development in entrepreneurship education, and developed a chart describing primary and secondary experiences and their interactions [5]. People have entered the "Internet plus" era as a result of the rapid advancement of Internet and information technologies. The introduction of "Internet plus" gives college students a solid foundation on which to launch their own businesses.

This paper analyzes the current situation and path optimization analysis of college students' innovation and entrepreneurship in the context of "Internet plus" and studies the current situation of college students' entrepreneurship mode in the context of "Internet plus", so as to better analyze the problems existing in college students' innovation and entrepreneurship. This paper also analyzes the deficiencies of universities and society in entrepreneurial learning of students, proposes the optimization of innovation and entrepreneurship path of college students in the context of "Internet plus", and gives a perfect explanation of the optimization of innovation and entrepreneurship path of college students. After experimental analysis, it is found that the optimization of innovation and entrepreneurship path of college students has greatly helped students enrich themselves, and teachers also pay more attention to students' ability to combine theory with practice, focusing on cultivating students' comprehensive practical ability in the innovation and entrepreneurship system, thus improving students' innovation ability and practical ability.

2. Current Situation and Problems of College Students' Innovation and Entrepreneurship Development in Context of "Internet plus"

2.1 College Students' Entrepreneurship in "Internet plus"

There are various ways for college students to start businesses online, and the content of integration with "Internet plus" in the traditional industry field is increasing day by day, showing a good development trend [6]. (1) In the retail field of "Internet plus", consumption through online platforms has become the first choice for young people, and users have also become accustomed to the convenience of online shopping, transparent prices and convenient returns. Due to the popularity of smartphones, the online shopping market is still expanding. So, many college students not only become netizens, but also become distributors of online shopping, combining the advantages of the internet with their own. For example, many college students, taking advantage of the geographical location of the tourist city where their school is located, have opened an online store selling local specialties, which can earn a lot of money every month. (2) "Internet plus" tourism: that is, "one can book travel plans without leaving home", which is an important application of the Internet in the tourism industry. Its core function is to provide customers with online services such as buying train tickets, air tickets, booking hotels, and buying tickets for scenic

spots.

2.2 Inadequate Implementation of Some Policies

At present, innovation and entrepreneurship are in the initial exploration stage. In order to ensure that college students have no worries, the government has provided good policy support for their innovation and entrepreneurship [7]. However, it is inevitable that some preferential policies for entrepreneurship are too general, lacking completeness, relevance, and standardization, especially in the field of internet entrepreneurship and primary and secondary cities where entrepreneurial resources and strategies are excessively concentrated, resulting in uneven regional distribution of entrepreneurial resources. The "revolving door" between entrepreneurship and employment has not yet been opened. When students decide to start their own businesses, subsequent reemployment may face tripartite agreements, work experience and other issues.

2.3 Unidentified Innovation Practice and Talent Cultivation in Universities

It is essential to have a high-quality and well prepared teaching team in order to improve college students' knowledge reserves of innovation and entrepreneurship and meet the demands of practical development. The lack of teaching staff has gradually become an important "bottleneck" that restricts the teaching of innovation and entrepreneurship among college students. Universities are currently having issues with the development of their entrepreneurship and innovation curricula, such as a severe lack of discipline leaders and backbone [8]. Most university teachers tend to focus on academic research. Despite having systematic theoretical knowledge, they lack practical experience in entrepreneurship and rote memorization of teaching methods. They have not effectively integrated practical experience in innovation and entrepreneurship into education and teaching. It is obvious that the paper-based entrepreneurship curriculum makes innovation and entrepreneurship teaching virtually non-existent.

At present, entrepreneurship education mainly focuses on classroom teaching, and a single teaching method and means may not meet the actual operational needs of students [9]. There is a lack of entrepreneurial skills and practical training, as well as insufficient teaching methods and interactive experience training. It is critical to accelerate college students' learning while they engage in practical innovation. The current entrepreneurial training isolates education from existing disciplines and professional technical education, and the integration of entrepreneurial and professional education is not close enough to fully mobilize students' enthusiasm and motivation to actively participate in innovation and entrepreneurship.

2.4 Current Situation of Incomplete Opening-up of Social Ideology

Some managers and educators in universities have a one-sided view on innovation and entrepreneurship education, without conducting scientific understanding and in-depth analysis. Indeed, professional education is the center of talent cultivation in universities, and the basic responsibility of teachers is to preach, impart knowledge, and dispel doubts. Innovation and entrepreneurship education, on the other hand, is a carrier for fully utilizing professional technical skills, and the two complement each other. Compared with entrepreneurship, innovation awareness is often overlooked, resulting in an awkward situation of "encouraging entrepreneurship is more than enough, but encouraging innovation is insufficient", which is detrimental to the growth of innovative spirit [10].

2.5 Insufficient Stamina of Students' Innovation Awareness and Entrepreneurial Literacy

Traditional education neglects the development of students' personalities and lacks the cultivation of high-quality innovative talents, resulting in a lack of thinking among college students in their daily lives [11]. Entrepreneurship is a process that is difficult to continuously explore, such as the need for comprehensive services and comprehensive planning. Pursuing success and ambition is a common challenge for modern students. Universities have limited education in promoting student innovation, and they mainly choose traditional industries that are easier to start with, while emerging industries involve less. In the context of "Internet plus", most students usually choose the third-party platform of "low investment, low threshold, and fast visibility". There is only one mode. They do not understand the market, blindly follow the trend of entrepreneurship under the condition of market saturation, which weakens students' entrepreneurial enthusiasm. Under this educational concept, students passively acquire theoretical knowledge, and experience few theories combined with practical application [12]. Students are mainly in school and have limited social connections with the outside world, leading to issues such as insufficient social experience, communication skills, risk assessment and prevention measures, and insufficient motivation and development potential.

This article aims to investigate the current problems in innovation and entrepreneurship among college students. A survey is conducted on the college student entrepreneurship park of a certain university, and members of eight entrepreneurship projects are surveyed to understand the various problems. The peak proportion of each problem was 1. The specific investigation is shown in Figure 1.

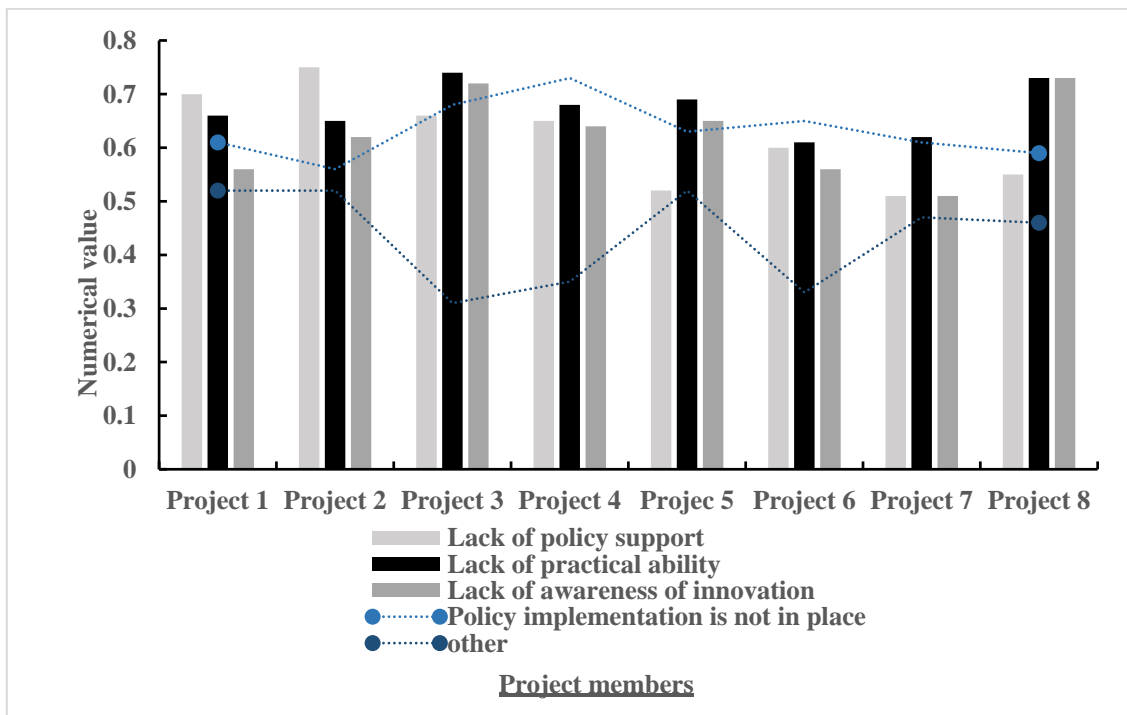


Figure 1: Current problems in innovation and entrepreneurship among college students

According to the survey, it can be seen that the main problems with innovation and entrepreneurship among current college students are a lack of policy support, insufficient practical ability, insufficient innovation awareness, and inadequate implementation of university policies. The main reason is that some universities have not fully and timely implemented the guidelines and policy documents issued by the state based on actual changes in development, resulting in students'

innovative ideas not being able to adapt to the current situation in a timely manner. More and more schools are focusing only on superficial entrepreneurship education, only in the form of breaking away from the training system. The main performance is to provide relatively few entrepreneurial foundation courses for all students according to requirements. The actual implementation of innovation and entrepreneurship education is limited to the competition of entrepreneurship projects, and the role of student entrepreneurship incubation bases has not played its due role.

3. Optimization of Innovation and Entrepreneurship Path of College Students in Context of "Internet plus"

3.1 Expanding and Implementing Innovation and Entrepreneurship Support Policies

This article has carefully sorted out various policy documents that have been released to encourage innovation and entrepreneurship, and clarified the aspects of the policies that have been implemented, have not yet been implemented, are being promoted, and are being discussed [13]. To strengthen the implementation of entrepreneurship policies, each region should formulate corresponding support policies in a timely manner based on its own actual situation, and establish a strong implementation mechanism in accordance with relevant national and local policies. The third is to increase support for entrepreneurs, establish entrepreneurial bases, attract more investors, relax market access standards, provide lower rental space for mass entrepreneurship, better utilize government funds, and further reduce taxes for free. Universities are a bridge connecting college students and society. It is necessary to strengthen support for innovation and entrepreneurship funds for college students, expand financing channels, such as funding from enterprises and social groups. It is necessary to provide timely and accurate entrepreneurial information and high-quality consulting services for college student entrepreneurship incubation bases, help promote the incubation of high-quality entrepreneurial projects and support college students' independent entrepreneurship [14].

3.2 Planning and Coordinating Innovation and Entrepreneurship Education System in Universities

Teachers are the key to innovation and entrepreneurship in schools. Starting from cultivating the spirit of innovation and entrepreneurship and related skills, it is necessary to encourage and guide students to embark on the correct path of innovation and entrepreneurship [15]. Innovation and entrepreneurship education needs to penetrate traditional professional education and undergo a process of research and accumulation [16]. Universities should systematically develop innovation and entrepreneurship education and professional practice, conduct in-depth research according to the principle of relevance, enrich and actively encourage innovation and entrepreneurship education resources for various professional courses.

3.3 Developing Innovation and Entrepreneurship Concepts

Teachers should encourage students to cultivate critical thinking, break traditional ideas and encourage students to open up and innovate. It is necessary to encourage students to spend more time thinking and be able to think and discover problems, encourage students to actively explore, cultivate innovative abilities, and be brave in criticism [17]. It is also support students' independent learning and thinking, maintain their research spirit and innovative thinking, create an atmosphere that respects true knowledge and pursues truth, and shift the purpose of encouraging entrepreneurship to enabling students with entrepreneurial spirit to have good development.

3.4 Enhancing Intrinsic Motivation of Innovation and Entrepreneurship

On the one hand, it is necessary to grasp the relationship between academics and entrepreneurship. Only by enriching academic knowledge and skills can the foundation be laid for entrepreneurship, and the two complement each other [18]. It is essential to learn how to avoid market risks and cultivate qualified social skills. On the other hand, in the new era, college students must have the thinking of "Internet plus", understand the current complex employment situation, and understand the social responsibility and mission of entrepreneurship. Innovative thinking is crucial and requires continuous improvement in innovation planning, organizational adjustment, and management capabilities. Entrepreneurs should first have a calm and peaceful mindset, and be mentally prepared for hard work and entrepreneurship [19]. It is vital to establish goals, formulate plans, make decisions, cultivate sustainability and the spirit of overcoming difficulties, and have a strong resistance to pressure and determination to overcome difficulties, and in this way, one can deeply cultivate oneself on the path of entrepreneurship.

To analyze the changes in cognitive ability, innovation ability, and innovation literacy of college students after optimizing their innovation and entrepreneurship paths, a survey is conducted on the changes in cognitive ability, innovation ability, and innovation literacy of members of three entrepreneurship studios in a certain university's entrepreneurship incubation base six months after optimizing their entrepreneurship paths. The specific situation is shown in Table 1.

Table 1: Changes in students' cognition, innovation ability, and innovation literacy before and after optimizing entrepreneurial paths

	Cognitive ability		Innovation ability		Innovative literacy	
	Before path optimization	After path optimization	Before path optimization	After path optimization	Before Path optimization	After path optimization
Entrepreneurship studio 1	0.79	0.91	0.72	0.92	0.71	0.88
Entrepreneurship studio 2	0.74	0.89	0.75	0.94	0.65	0.84
Entrepreneurship studio 3	0.69	0.93	0.71	0.91	0.74	0.9
Mean value	0.74	0.91	0.73	0.92	0.70	0.87

According to Table 1, it can be seen that after optimizing the innovation and entrepreneurship path of college students, their cognitive ability, innovation ability, and innovation literacy are continuously improving over time. Throughout the process, students' cognitive ability improved by 0.17; their innovation ability improved by 0.20; their innovation literacy improved by 0.17. The improvement of cognitive ability, innovation ability and innovation literacy shows that the optimization of college students' innovation and entrepreneurship path has greatly helped students enrich themselves, and teachers also pay more attention to students' ability to combine theory with practice, and focus on cultivating students' comprehensive practical ability in the innovation and entrepreneurship system, thus improving students' innovation ability and practical ability. By promoting innovation through practice, students can grow their talents through practice, and entrepreneurship courses should be included in elective courses to change the learning methods instilled through heuristic teaching methods [20]. Afterwards, the comparison of students' practical abilities, policy support, and innovation awareness between the optimized innovation and entrepreneurship paths of college students and those before the optimization is analyzed. The specific comparison is shown in Figure 2.

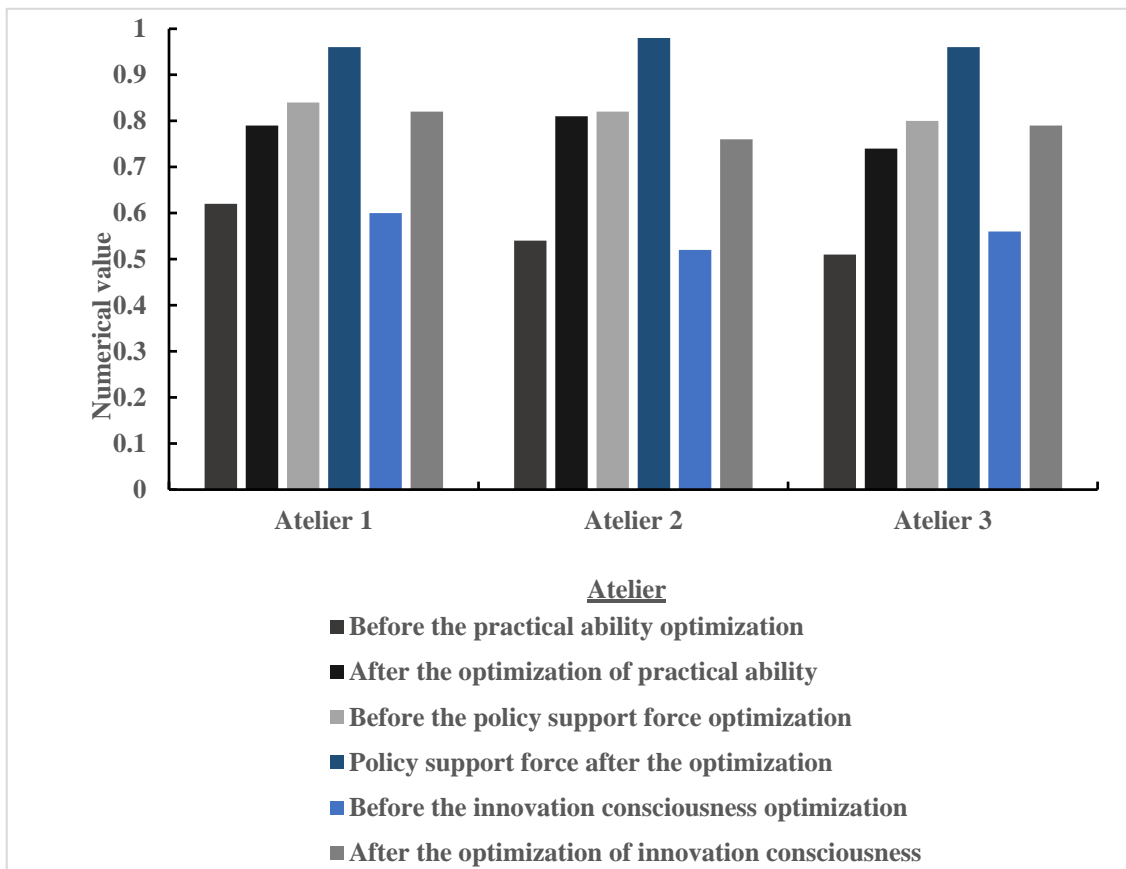


Figure 2: Changes in students' practical ability, policy support, and innovation awareness before and after the optimization of entrepreneurial paths

According to the data presented in Figure 2, it can be seen that the practical ability, policy support, and innovation awareness of college students after optimizing their innovation and entrepreneurship paths are better than before. Their practical ability has been improved by 0.22; policy support has been improved by 0.15; innovation awareness has been improved by 0.23 compared to the original. After optimizing the innovation and entrepreneurship path, it can help students combine theory with practice, improve their practical ability and comprehensive quality, and also cultivate their thinking ability. It can be seen that optimizing the original innovation and entrepreneurship path of college students can enhance their innovation awareness and practical ability, laying a better foundation for college students' entrepreneurship.

4. Conclusions

Following the advent of the "Internet plus" era, there are more and more opportunities for college students to start their own businesses. Studying the entrepreneurial methods of college students can provide a theoretical basis for their entrepreneurship and optimize their entrepreneurial methods, thereby enhancing their entrepreneurial enthusiasm and promoting their independent entrepreneurship. The article analyzes the various modes of current college students' entrepreneurship and explores them from the perspective of "Internet plus" in order to lay the foundation for future college students' entrepreneurship and thus improve their success rate of entrepreneurship. The innovation and entrepreneurship of college students in the "Internet plus" environment is a long-term and systematic project, and its development still has a long way to go. In order to solve the problems faced by college students in their innovation and entrepreneurship,

the government, society and schools need to work together to deepen policies, strengthen college education, strengthen public opinion and improve students' own quality. Only in this way can college students' innovation and entrepreneurship in the "Internet plus" environment go more broadly and smoothly.

References

- [1] A. Ghafar. "Convergence between 21st century skills and entrepreneurship education in higher education institutes." *International Journal of Higher Education* 9.1 (2020): 218-229.
- [2] Gabriel Linton, Markus Klinton. "University entrepreneurship education: a design thinking approach to learning." *Journal of innovation and Entrepreneurship* 8.1 (2019): 1-11.
- [3] Ben Niu, Qianying Liu, and Yiming Chen. "Research on the university innovation and entrepreneurship education comprehensive evaluation based on AHP method." *International Journal of Information and Education Technology* 9.9 (2019): 623-628.
- [4] Inese Mavlutova, Aivars Spilbergs, Atis Verdenhofs, Andris Natrins, Ilja Arefjevs, Tatjana Volkova "Innovative teaching techniques for entrepreneurship education in the era of digitalisation." *WSEAS Transactions on Environment and Development* 16.1 (2020): 725-733.
- [5] Gustav H., Agnieszka Kurczewska. "Toward a learning philosophy based on experience in entrepreneurship education." *Entrepreneurship Education and Pedagogy* 4.1 (2021): 4-29.
- [6] Dafna Kariv, Luis Cisneros, Mihai Ibanescu. "The role of entrepreneurial education and support in business growth intentions: The case of Canadian entrepreneurs." *Journal of Small Business & Entrepreneurship* 31.5 (2019): 433-460.
- [7] Dotun Olaleye Faloye, Olabode David Olatunji. "Entrepreneurship education and self-employment intentions among fresh graduates in Nigeria." *Journal of Economics and Sustainable Development* 9.12 (2018): 146-158.
- [8] Irfan Hameed, Zainab Irfan. "Entrepreneurship education: a review of challenges, characteristics and opportunities." *Entrepreneurship Education* 2.3 (2019): 135-148.
- [9] Zakieva, Rafina Rafkatovna, Kolmakov, Vladimir Vladimirovich; Pavlyuk, Albert Valentinovich; Ling, Viktoriya Viktorovna; Medovnikova, Dariya Vladimirovna. "The significance of studying legal protection of rights on innovative creations: The case of entrepreneurship education." *Journal of Entrepreneurship Education* 22.3 (2019): 1-11.
- [10] Jill Kickul Kickul, Lisa Gundry, Paulami Mitra. "Designing with purpose: advocating innovation, impact, sustainability, and scale in social entrepreneurship education." *Entrepreneurship Education and Pedagogy* 1.2 (2018): 205-221.
- [11] Giuliano Sansone, Daniele Battaglia, Paolo Landoni, Emilio Paolucci. "Academic spinoffs: The role of entrepreneurship education." *International Entrepreneurship and Management Journal* 17.1 (2021): 369-399.
- [12] Kai Hockerts. "The effect of experiential social entrepreneurship education on intention formation in students." *Journal of Social Entrepreneurship* 9.3 (2018): 234-256.
- [13] Ashish K. Bhatia, Natalia Levina. "Diverse rationalities of entrepreneurship education: An epistemic stance perspective." *Academy of Management Learning & Education* 19.3 (2020): 323-344.
- [14] Olufemi Aladejebi. "The effect of entrepreneurship education on entrepreneurial intention among tertiary institutions in Nigeria." *Journal of Small Business and Entrepreneurship Development* 5.2 (2018): 1-14.
- [15] Nathalie Duval-Couetil, Michael Ladisch, Soohyun Yi. "Addressing academic researcher priorities through science and technology entrepreneurship education." *The Journal of Technology Transfer* 46.2 (2021): 288-318.
- [16] Robin Bell. "Adapting to constructivist approaches to entrepreneurship education in the Chinese classroom." *Studies in Higher Education* 45.8 (2020): 1694-1710.
- [17] Olof Zaring, Ethan Gifford, Maureen McKelvey. "Strategic choices in the design of entrepreneurship education: an explorative study of Swedish higher education institutions." *Studies in Higher Education* 46.2 (2021): 343-358.
- [18] Bethany Hardie, Camilla Highfield, Kerry Lee. "Entrepreneurship education today for students' unknown futures." *Journal of Pedagogical Research* 4.3 (2020): 401-417.
- [19] Mohammad Suleiman Awwad, Rana Mohammad Najati Al-Aseer. "Big five personality traits impact on entrepreneurial intention: the mediating role of entrepreneurial alertness." *Asia Pacific Journal of Innovation and Entrepreneurship* 15.1 (2021): 87-100.
- [20] Fangjing Li. "Research On The Management System Of College Students' Innovation And Entrepreneurship Education Based On B/S Architecture." *Journal of Applied Science and Engineering* 26.5 (2022): 597-604.