Opinion Article

Exploration on the integration of innovation and entrepreneurship education into the talent training system of colleges and universities under the background of double-first construction

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Abstract: Science and technology and innovation are the main drivers of social development at this stage. Modern national governance and education system should further improve the strength of innovation and entrepreneurship education. However, at present, some colleges and universities focus on professional subject education, and have insufficient knowledge and attention to innovation and entrepreneurship education. Even if they offer entrepreneurship-related courses, there are still problems such as ambiguous teaching content, weak entrepreneurship teaching atmosphere, and utilitarian teaching objectives. To this end, this paper focuses on the national double-first construction strategic tasks, innovative talent training system research, and colleges and universities’ innovative talent training plan.

Keywords: double-first background; entrepreneurship education; talent training

1. Introduction

Double-first construction is an important strategic decision for the development of education in China at present. It has repositioned and shaped the direction
and basic pattern of higher education and improved the awareness of innovation
and entrepreneurship education and innovative talent training in colleges and uni-
versities. Innovation is the process of turning a new concept into commercial suc-
cess or widespread use. Creativity is an active process necessarily involved in in-
novation. It is a learning habit that requires skill as well as specific understanding
of the contexts in which creativity is being applied. Plan professional courses, 
teaching methods, coordinate domestic resources, and social resources, and take
advantage of national cultural exchange opportunities to jointly promote the con-
struction plan. Innovation and entrepreneurship education needs to rely on the im-
plementation of the talent training function of colleges and universities (Cabero, 
2019; Guachi, 2019). Therefore, it is necessary to establish corresponding training
strategies from a practical perspective, focusing on the current situation of talent
training in colleges and universities.

2. The development of innovation and entrepreneurship education in col-
leges and universities

2.1. Establish an innovation and entrepreneurship education system

It is necessary to take innovation and entrepreneurship as the strategic goal of
navigation, and with this as the focus of work, colleges and universities should
build an innovation and entrepreneurship education college with the awareness of
integrating thinking and overall planning, combining on-campus resources, social
resources, scientific research strength, and talent advantages. As the overall lead
unit, the School of Innovation and Entrepreneurship coordinates the Student Of-
fice, the Academic Affairs Office, and other departments to work together to pool
their wisdom and jointly promote the implementation of innovation and entrepreneurship.

Improve various facilities and promote internal and external cooperation. The educational resources of colleges and universities are limited. In order to ensure that the reform of innovation and entrepreneurship education is implemented in colleges and universities, colleges and universities should coordinate the educational resources of all parties inside and outside the university, strengthen the construction of various infrastructures such as software and hardware, so that students can use rich resources to carry out entrepreneurial practice activities. At the same time, in the process of promotion, it is necessary to use the information-based communication platform and the information-based management platform to promote various functional departments to strengthen contact and promote collaborative progress (Zhou, 2021). Educational funds should be invested from different channels to provide financial support for innovation and entrepreneurship education, special services, and construction of venues and hardware facilities to make sure the education work is implemented faster.

2.2. Building a Hybrid Guidance System

Establish genes and concepts, and innovate talent training models. Colleges and universities should aim to build morality and cultivate people, implement innovation and entrepreneurship education into the whole process of talent training, and integrate innovation and entrepreneurship concepts and methods with professional course teaching. In the theoretical teaching of professional courses, strengthen the practice of innovation and entrepreneurship, form teaching characteristics, synergize social resources, establish a training plan for innovative and
entrepreneurial talents, and use multiple practical measures to stimulate the innovative spirit and entrepreneurial ability of college students (Yang & Wang, 2020).

Taking informatization as the form of education, establish an online and off-line hybrid teaching mode, for all students, provide employment and entrepreneurship guidance for students in the form of compulsory courses and elective courses, and combine professional characteristics to establish general education + subject foundation majors. The innovation and entrepreneurship education curriculum system of "education + independent curriculum. Colleges and universities should transform from traditional lecture-based teaching to network-based teaching, relying on online course teaching forms such as MOOCs and Tencent Classrooms to provide support for the creation of innovation and entrepreneurship education courses. Today's college students are a generation that grew up in the development of the Internet, so they are more receptive to the online teaching model, and through online teaching, they can widely mobilize and strengthen the practice of students' innovation and entrepreneurship courses and the progress of teaching tasks monitor.

2.3. Build an innovation and entrepreneurship platform

It is college teachers who should encourage college students to actively participate in innovation and entrepreneurship practice teaching activities, so that students have the courage to break the routine, learn innovation and entrepreneurship theory, pool creativity, and strengthen their practical ability with the help of innovation and entrepreneurship practice platform. Before that, colleges and universities need to practice entrepreneurship for students, build entrepreneurial incubation parks, integrate internal and external resources, and provide one-stop guidance and services for college students to start their own businesses (Xie, Chen, & Li, 2020).
The close combination of theory and practice helps students make innovations and breakthroughs. Colleges and universities need to update and optimize in real-time according to the practical teaching situation of students' innovation and entrepreneurship education and form an innovative experimental training system for college students around the four levels of colleges and universities, branches, provinces, cities, and countries. At the same time, colleges and universities should build an innovation and entrepreneurship practice education system, combine existing resources of teaching schools with social resources, strengthen school-enterprise cooperation, jointly build and share resources, build a school-enterprise cooperative teaching platform, and integrate technology, practical positions, specific projects with professional courses and innovation and entrepreneurship education to deepen talent training under the joint action of schools and enterprises (Wen, 2019).

Advocate innovative practice and create a second classroom. Colleges and universities should actively play the role of the second classroom in innovation, entrepreneurship education, and combine the specific work content of innovation and entrepreneurship education as a compulsory course for students to achieve full coverage of student education, and regularly introduce innovation and entrepreneurship education into the second classroom. Create a resource library of high-quality teaching project cases.

3. Double-first, strategic positioning in construction

3.1. Double-first, the fundamental foothold of the university
To build a double-first, the overall goal of the university is to cultivate talents, scientific research, social services, cultural inheritance, and innovation. Higher education institutions have become an important force for knowledge dissemination and scientific and technological innovation, an important carrier of advanced ideas and excellent cultural inheritance. In order to implement this overall goal, although the four development tasks of talent training, scientific research, social service, and cultural inheritance and innovation have been specified, it needs to be clear that in innovation and entrepreneurship education, the cultivation of innovative talents is the foundation of all development and education. Colleges and universities need to rely heavily on the cultivation of innovative talents so that the four development tasks form a state of mutual coupling. In the process of cultivating innovative talents, colleges and universities need to combine teaching, scientific research, labor, etc. to build a positive and innovative, knowledge-respecting academic environment for students, so that innovative talent training education, and scientific research, social services and cultural heritage are connected. At the same time, it can also provide students with scientific research units or industrial units with direct experience and ability, and integrate the educational resources of colleges and universities, scientific research resources of scientific research units, production resources of enterprises, and cultural resources, which not only meets the task requirements of practical education in colleges and universities but also meets the talent needs of economic and social development, and at the same time, consciously inherit traditional culture in talent training, and carry out innovation and development of traditional culture.

3.2. Collaborative multi-task integration promotion
The deepening of a single task and the coordination of multiple tasks are the basic logic of building a double-first university. The fundamental task of implementing the task of building a first-class institution of higher learning is the cultivation of innovative talents. Specifically, it is analyzed at two levels.

Highlight the core of talent training, clarify the requirements for the ability and quality of innovative talent training, and cultivate students' sense of mission and social responsibility, so that students have the innovative spirit and practical ability required by modern society, and become compound and applied professionals. Schools can encourage and support students to participate in innovative and entrepreneurial practice activities, stimulate students' wisdom and personality, and enable students to improve their comprehensive personal quality in social practice, broaden their international vision, and develop scientific spirit and entrepreneurial awareness.

Colleges and universities should combine the innovative talent training plan with other ideological tasks to form a relationship of mutual connection and simultaneous development. First, teachers should play a guiding role, and colleges and universities should strengthen the construction of teachers' morality and style, build a professional team of teachers with ideals, morality, self-cultivation, and benevolence, or hire a variety of companies to share their workplace experience, especially alumni enterprises, more authenticity and affinity. Strengthen the development of scientific research disciplines and the improvement of professional capabilities, focus on building a number of domestic leading disciplines and research fields that are comparable to international scientific research levels, and create an innovative and entrepreneurial practice environment, so that students can take the initiative to explore in a relaxed academic atmosphere.
4. The integration of innovation and entrepreneurship education and talent training

4.1. From the perspective of entrepreneurial practice, focus on the cultivation of workability

Workability is an important part of talent training in the new era, and it is also the foundation for students to stand in society and achieve self-development after graduation. However, at this stage, the basic workability of students is not connected with the majors they study in universities, which means that the majors that many studies are not related to the jobs they engage in after graduation. Therefore, when establishing a training plan around workability, two aspects should be considered. The first is the job counterpart, which has relatively high requirements and measurement standards for students' workability, and is also relatively professional. It is necessary to master the professional knowledge and professional skills required in the corresponding position. For construction engineering surveying positions, it is necessary to clarify the measurement technology, lay-out operation, etc., as well as to pay attention to new technologies and new theories in the industry, and to comprehensively consider the different characteristics of different building structures and quality requirements.

For design positions, you must know how to draw, use electronic drawing tools, and master some mechanics knowledge. These jobs are very professional, but being able to do these jobs requires the support of basic abilities. If you lack systematic knowledge and basic abilities, you will be unable to do the job just by virtue of your interest. For non-corresponding work, such as clerical, administrative, personnel, and other types of work, there is no high technical content. Although these jobs do not have technical requirements, they also require basic work
skills. For example, master office software, copywriting, interpersonal communication, and other skills. Therefore, to cultivate innovative talents, the cultivation of their working ability is very important, so that students can comprehensively analyze and solve practical problems based on the knowledge they have learned and accumulated practical experience. When encountering complex problems, it can also flexibly reorganize knowledge according to the existing knowledge system and find new solutions. Therefore, colleges and universities should build a practical education platform for innovation and entrepreneurship, strengthen the integration of production and education, establish a school-enterprise coordination compound professional talent training mechanism, and focus on the basic working abilities that innovative talents need to master to stimulate their potential.

4.2. From the perspective of thinking, focus on thinking training

Most people do not think that this is an important ability in the understanding of ideological values. In real work, it is difficult to distinguish between strengths and weaknesses due to differences in individual concepts. For example: in the same class, some students study well in school, but after graduation, their work is not satisfactory and their life is relatively mediocre, while some students have mediocre grades in school, but their careers are flourishing. The fundamental reason for these differences lies in the ability of individuals, as well as the influence of family factors and growth background. At the same time, the key factor that plays a major role is the difference in individual ideological values. For example, many students in colleges and universities are in a state of confusion when facing career planning and life choices. They do not know what they will do in the future. How to make career planning to maximize their own interests and values? Students do not have a clear understanding of these.
They often face life and deal with work problems with a “let by” mentality, without considering their long-term career development and life. However, if students have scientific, objective, and correct ideological values, and can take their career and life seriously with scientific cognition, it will be easier to see the essence of the problem when facing setbacks in life, and to strengthen the direction of their choice. Therefore, colleges and universities should strengthen the cultivation of students’ thinking ability, so that students can establish scientific and objective values and outlook on life. For example, in response to this problem, Zhejiang University has proposed strengthening the characteristics of the integration of science and education, emphasizing that scientific research educates people, encouraging students to actively participate in scientific research, and training logical thinking in the process of discovering new phenomena, revealing new mechanisms, and establishing new theories. At the same time, it advocates breaking disciplinary barriers, forming a project orientation, promoting the construction of a multi-disciplinary talent training center of excellence, cultivating innovative talents in the interdisciplinary and knowledge integration, and improving students' thinking ability and innovation ability.

4.3. Promote the international development of education

The current era is an organically connected whole, which endows the cultivation of innovative talents with national characteristics. Under the dual strategy of going out and inviting in, colleges and universities should focus on the national education strategy to improve the ability of innovative talents to participate in international affairs. For example: Encourage and guide students to actively participate in international academic exchanges, strengthen cultural communication and interpersonal communication skills in cross-cultural exchanges, be able to stand at
the forefront of the development of the times, pay attention to and gain insight into the trend of scientific development, broaden the international vision, and understand the common interests of all mankind important development issues of concern. After the double-first construction is implemented, colleges and universities should increase the number of library books, provide students with a variety of academic resources, improve various hardware and software infrastructure, and provide students with opportunities for diverse practice, so that students can use these resources to develop comprehensive capabilities.

Efforts are made to add exchange programs with world-class universities and strive to provide each student with an opportunity for overseas exchange and learning, as well as the active expansion of high-level international talent training programs proposed by Tsinghua University, all focus on cultivating innovative talents who are competent in international affairs.

5. Conclusion

Based on the above analysis, innovation and entrepreneurship education are directly related to the cultivation of innovative talents. In double-first university construction, the quality of talent cultivation also determines the competitiveness and advantages of talents in social development. Colleges and universities should stand in the center of economic and social development. The required compound and applied talent training and international development perspective, combined with national education policies, organize students to participate in innovation and
entrepreneurship social practice activities, academic exchanges, etc., provide students with rich educational resources and innovation and entrepreneurship practice opportunities so that students can use resources and practical activities to improve their comprehensive ability and align themselves with the talent standards required by society.

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