Journal of Contemporary Educational Research, 2025, Volume 9, Issue 11
http://ojs.bbwpublisher.com/index.php/JCER
ISSN Online: 2208-8474
ISSN Print: 2208-8466

Research on the Training Path of Higher Vocational Students' Innovation and Entrepreneurship Capabilities

Jinhua Xu

Nanchong Vocational College of Culture and Tourism, Nanchong 637400, Sichuan, China

Abstract: Guided by the China International College Students' Innovation Competition, higher vocational colleges, as the main position for cultivating technical and skilled talents, need to explore a suitable training path for higher vocational students' innovation and entrepreneurship capabilities. Therefore, based on the background of the competition, this paper deeply analyzes the current situation and problems of cultivating higher vocational students' innovation and entrepreneurship capabilities. It proposes paths from aspects such as curriculum system construction, construction of the integration platform of competition and teaching, construction of a diversified teaching team, improvement of the innovation and entrepreneurship work mechanism, and creation of a strong campus cultural atmosphere. The purpose is to promote the reform of innovation and entrepreneurship education and teaching in higher vocational colleges through the competition and enhance the core competitiveness of higher vocational students.

Keywords: College students' innovation competition; Higher vocational students; Innovation and entrepreneurship capabilities; Training path

Online publication: December 8, 2025

1. Introduction

The China International College Students' Innovation Competition is a nationally influential event that provides a practical platform for college students to display innovative achievements, exchange innovative ideas, and share entrepreneurial experience. The practice orientation and innovative spirit advocated by the competition are highly consistent with the talent training goals of higher vocational colleges. It can fully stimulate students' innovative potential, accelerate the market transformation of scientific research achievements, exercise students' practical abilities, promote exchanges and cooperation between schools and enterprises, and increase resource utilization rate [1–3]. Higher vocational colleges must accurately grasp market demand, optimize the curriculum system, highlight practical teaching, realize the transformation from "imparting knowledge" to "empowering competence and quality," and cultivate more high-quality technical and skilled talents with an innovative spirit and entrepreneurial capabilities. This is also the core foothold for vocational education to serve the national

innovation-driven development strategy.

2. The core values of innovation and entrepreneurship education in higher vocational colleges under the background of the competition

2.1. Stimulating innovative potential and practical ability

By integrating resources from schools, enterprises, and society, the competition adopts methods such as simulated entrepreneurship and technological innovation to enable higher vocational students to learn decision-making during the competition and enhance their decision-making ability, pressure resistance, and market adaptability. The competition encourages students to use their professional expertise to solve practical problems while emphasizing the combination of innovative spirit and adventurous spirit [4]. The market competition pressure and operational risks faced in the competition can improve students' psychological quality and lay a solid psychological foundation for their future entrepreneurship.

2.2. Driving the reform of education and teaching

The competition forces higher vocational colleges to break the traditional education and teaching model, promote teaching reform, and realize "promoting learning through competitions, promoting teaching through competitions, and promoting innovation through competitions" [5]. Firstly, break disciplinary barriers and reshape the curriculum system. Organic integrates professional education with innovation and entrepreneurship education, promotes the "embedded" teaching reform. Teachers intersperse innovative methodologies while imparting professional courses, transforming the original "one-way indoctrination" into "two-way interaction." Secondly, update teaching methods and evaluation mechanisms. Incorporate competition awards into the curriculum evaluation system, replace closed classroom teaching with project-based training, and transform innovation and entrepreneurship education from "elite education" to "mass education." Thirdly, reconstruct teachers' abilities. The competition urges teachers to transform from simple knowledge imparters to versatile mentors. Specifically, professional teachers need to have innovative capabilities, and innovation and entrepreneurship teachers should understand industry practices to avoid the phenomenon of "part-time" work by staff from administrative departments.

2.3. Optimizing the talent training ecosystem

In response to the requirements of the innovation-driven development strategy, cultivate compound talents with both professional skills and innovative capabilities in accordance with the industry-education integration model of "technological innovation + professional internship + competition + entrepreneurial practice." Firstly, give full play to the advantages of the "double innovation platform." Through double innovation competitions and on-the-job internships, let students face enterprise needs directly. Off-campus practice supplements the shortcomings of on-campus training, enhances students' social adaptability and professional quality, and forms an ecological cycle of "professional groups connecting with industrial groups" [6–8]. Secondly, take stimulating students' entrepreneurial awareness and cultivating their entrepreneurial ability as the starting point to help students' all-round development, boost the transformation of technologies and achievements, drive employment and entrepreneurship, and promote local economic development.

3. Current situation and problems in cultivating higher vocational students' innovation and entrepreneurship capabilities

At present, the cultivation of higher vocational students' innovation and entrepreneurship capabilities presents a situation where "awareness awakening" and "ability lag" coexist. Most students have a certain understanding of innovation and entrepreneurship, as well as subjective ideas and enthusiasm for entrepreneurship, but the proportion of transforming ideas into actions is still not high enough.

3.1. Student level

Higher vocational education focuses on the standardized training of students' professional skills, and to a large extent ignores the cultivation of students' innovative literacy such as critical thinking, problem-finding ability, and cross-border integration ability. According to a survey conducted at Nanchong Vocational College of Culture and Tourism, 52.3% of students have insufficient independent exploration ability. They have little understanding of core elements such as market risks and resource integration, and are afraid of bearing the risks of entrepreneurship and the uncertainty of unpredictable opportunities. 20.5% of students have never paid attention to innovation and entrepreneurship-related competitions held by the school. 17.2% of students have no idea how to innovate. 10.7% of students said that due to the lack of guidance, funding support, and other issues, they have entrepreneurial ideas, but it is difficult to implement them.

3.2. Education level

As one of the important starting points to promote the transformation and upgrading of talent training models, innovation and entrepreneurship education has been incorporated into the talent training curriculum system by many universities, but there are still many structural problems. Firstly, the curriculum system construction is not reasonable enough. Most innovation and entrepreneurship courses in higher vocational colleges are still based on a "scattered" curriculum system, without clear creation ideas and plans, and course teaching mostly stays at the stage of theoretical lectures [9]. Secondly, the professional level of teachers is uneven. Most of the teachers who teach innovation and entrepreneurship courses are counselors, administrative staff, and other non-professional teachers. They lack a strong disciplinary and professional background, their own innovative ability is relatively weak, and they lack relevant entrepreneurial practice experience, which affects the reliability and validity of innovation and entrepreneurship education. Thirdly, the teaching method is relatively single. It is usually dominated by "teachers teach and students learn," where students are in a passive receiving state with few opportunities for active thinking and practice. Fourthly, the allocation of educational resources is relatively lagging behind. Most schools are insufficient in resource investment, venue construction, equipment configuration, and other aspects, and lack practical carriers such as on-campus and off-campus innovation and entrepreneurship training bases and incubation platforms. It is difficult for students to experience real project operation, which is not conducive to students transforming ideas into actions.

3.3. Mechanism level

The state and local governments have issued a series of policies to promote innovation and entrepreneurship, continuously improving the institutional environment for innovation and entrepreneurship. The education field is also actively promoting the integrated development of industry and education, implementing school-enterprise collaborative education, and jointly establishing internship and training bases and entrepreneurship incubation bases to provide students with diversified practical platforms [10,11]. Most higher vocational colleges have set up innovation and entrepreneurship education management departments, but most of them are affiliated

with the Career Guidance Center or the Department of Student Affairs, lacking full-time teachers, a systematic curriculum system, and development plans. The school-enterprise cooperation in some universities still stays at the level of visits, investigations, or internships and training. They have not carried out technical docking, joint project research, talent co-cultivation, and other work based on enterprise needs, nor have they formed a sound off-campus practice base and entrepreneurship demonstration base.

4. The impact of the competition on enhancing higher vocational students' innovation and entrepreneurship capabilities

Based on an analysis of the development and changes in the innovation and entrepreneurship capabilities of participating students at Nanchong Vocational College of Culture and Tourism over the past three years, the competition has played a positive role in promoting the improvement of students' innovation and entrepreneurship capabilities. At the initial stage of the competition, the survey found that most students still needed to improve their innovative awareness and entrepreneurial knowledge. For example, in the innovative thinking ability assessment, only about 1/3 of the students could think independently and form original business ideas; the students also generally scored low in the team collaboration ability assessment, with an average score of 3.1 (out of 5 points). This indicates that participating students lacked effective communication, the spirit of unity and collaboration, and their scientific decision-making ability was also weak. However, as the competition continued, the students' comprehensive abilities continued to improve. Through repeated polishing of projects, guidance from participating teachers, and multiple rounds of roadshow drills, students continuously made up for their own shortcomings in abilities. After the competition, the students' innovative thinking ability increased from 2.6 points before the competition to 4.1 points after the competition, a growth of 57%; their team collaboration ability also improved significantly, with an average score of over 4.5 points. It can be seen that students can work together to overcome difficulties, support each other, and grow together in the competition.

5. Innovation and entrepreneurship ability training path based on the competition

Driven by the "Mass Entrepreneurship and Innovation" policy and influenced by the strong social atmosphere of innovation and entrepreneurship, higher vocational students are no longer satisfied with traditional employment methods and show a strong desire for knowledge and self-development. Aiming at the current problems in innovation and entrepreneurship education, such as the monotonous curriculum system, the disconnection between theory and practice, and the low enthusiasm of students, it is urgent to explore a path suitable for cultivating the innovation and entrepreneurship capabilities of higher vocational students.

5.1. Building a hierarchical and progressive curriculum system

Adhere to attaching equal importance to imparting knowledge and cultivating students' abilities, break the discipline-oriented curriculum system, reorganize curriculum modules, and promote the organic integration of professional teaching and innovation and entrepreneurship education. Introduce competition evaluation indicators (innovation, commerciality, etc.) into professional courses, and offer practical courses such as Innovation and Entrepreneurship Risk Prevention and Control and Business Model Design to stimulate students' creativity and business thinking; introduce competition projects into teaching cases to exercise students' thinking ability, practical ability and team collaboration ability; extend the classroom to outside the campus and into enterprises, and cultivate students' innovation and entrepreneurship quality and innovative ability in a real

working environment.

5.2. Building a practical platform integrating competition and teaching

Higher vocational colleges should strengthen cooperation with enterprises to establish an integrated practical platform covering "teaching–training–incubation–transformation." On the one hand, they should increase investment in the construction of on-campus entrepreneurial incubation bases, equip them with complete office equipment, provide high-quality technical support and management services, and create a low-cost and convenient entrepreneurial startup environment for students. On the other hand, they should make good use of high-level competition projects such as the "College Students' Innovation Competition," "Challenge Cup," and "Entrepreneurship Plan Competition," allowing students to compete practically both on and off campus and improve themselves in the competitions [12–14].

5.3. Promoting the construction of a diversified teaching team

Higher vocational colleges should focus on building a collaborative teaching team consisting of "on-campus tutors (professional teachers) + enterprise tutors (industry experts) + competition tutors (competition judges)." They should actively introduce senior practitioners from the frontline of enterprises, successful entrepreneurs, and industry experts to serve as part-time tutors or guest lecturers, who will participate in curriculum design, project guidance, and achievement evaluation. This promotes in-depth integration between colleges and industries, forms a cross-field and cross-functional collaborative education mechanism, and truly realizes the educational ideal of "learning by doing and doing by learning."

5.4. Improving the innovation and entrepreneurship mechanism

Higher vocational colleges should set up special management institutions for innovation and entrepreneurship education, establish education funds, improve the operation mechanism, accelerate school-enterprise integration, and build a full-process service chain. They should set up different types of special scholarships and grants, entrepreneurial project support funds, and "seed player" cultivation funds for students of different grades. These funds will reward students who make bold attempts and are excellent entrepreneurial practitioners, turning innovation and entrepreneurship from "dreams" into reality. At the same time, they should encourage enterprises to deeply participate in the entire process of vocational education, promote the matching of real industrial needs with talent training goals, and promote the upgrading of innovation and entrepreneurship education in higher vocational colleges from "formal coverage" to "substantive empowerment" [15,16].

5.5. Creating a strong campus cultural atmosphere

A strong and dynamic cultural atmosphere for innovation and entrepreneurship should be created on campus. On the one hand, the school should consciously organize a series of branded innovation and entrepreneurship activities, such as "innovation and entrepreneurship forums, entrepreneur lectures, alumni sharing sessions, and maker markets," and hold regular themed lectures to enhance students' understanding of innovation and entrepreneurship. On the other hand, it should give full play to the publicity role of campus media, using the Internet and new media to show outstanding entrepreneurs and typical deeds from multiple angles, in an all-round and three-dimensional manner. This encourages students to learn from role models and form a good atmosphere of "daring to think, daring to try, and daring to act."

6. Conclusion

College students' innovation competitions can effectively improve the innovation and entrepreneurship capabilities of higher vocational students. Higher vocational colleges should adhere to the principle of "promoting learning through competitions, promoting teaching through competitions and promoting innovation through competitions," actively carry out innovation and entrepreneurship education, cultivate students' innovative spirit, enhance their entrepreneurial awareness and abilities, and cultivate more innovative talents for the development of the new era, so that vocational education can better serve regional economic development.

Funding

Teaching Reform Research Project of Nanchong Vocational College of Culture and Tourism in 2023: Research on the Training Path of Higher Vocational Students' Innovation and Entrepreneurship Capabilities from the Perspective of the "Internet +" College Students' Innovation and Entrepreneurship Competition (JG2023A13)

Disclosure statement

The author declares no conflict of interest.

References

[1] Zhao X, Yang L, Dai X, et al., 2024, Cultivation of College Students' Innovation and Entrepreneurship Abilities Based on the China International College Students' Innovation Competition. Journal of Innovation and Entrepreneurship Theory Research and Practice, 7(14): 194–198.

[2] Yuan LJ, Jia J, Guo R, et al., 2025, Research on the Cultivation Path of Higher Vocational Students' Innovation and Entrepreneurship Abilities Driven by Innovation Competitions. Modern Business and Trade Industry, (11): 146–148.

[3] Bi Q, 2023, Research on the Cultivation Path of College Students' Innovation and Entrepreneurship Abilities through the "Internet +" Competition. Journal of Innovation and Entrepreneurship Theory Research and Practice, 6(10): 113–116.

[4] Duan LL, Wang ZX, 2024, Exploration of the Cultivation Path for Higher Vocational Students' Innovation and Entrepreneurship Abilities from the Perspective of "Internet +." Journal of Higher Education, 10(20): 85–88.

[5] Mou LX, 2025, Research on the Ways to Cultivate Higher Vocational Students' Innovation and Entrepreneurship Abilities in the New Era. Public Relations World, (10): 60–62.

[6] Tan HM, 2024, Research on the Strategies for Cultivating College Students' Innovation and Entrepreneurship Abilities in Higher Vocational Colleges. Teacher, (7): 120–122.

[7] Lin XP, Dun YP, Xiao HF, et al., 2025, Exploration of the Cultivation System for College Students' Innovation and Entrepreneurship Abilities under the Background of Mass Entrepreneurship and Innovation. China Educational Technology & Equipment, (6): 138–141.

[8] An N, 2025, Analysis of the Cultivation Path for Higher Vocational Students' Innovation and Entrepreneurship Abilities. Learning Weekly, 10(10): 82–85.

[9] Long XP, 2025, Exploration of the Ways to Cultivate Higher Vocational Students' Innovation and Entrepreneurship Abilities under the Background of High-Quality Development. Journal of Innovation and Entrepreneurship Theory

Research and Practice, 8(10): 122–124.

[10] Dou BY, Yu JH, Xu GY, et al., 2023, Research on the Cultivation of Higher Vocational Students' Innovation and Entrepreneurship Abilities. China Science & Technology Panorama Magazine, (19): 143–145.

[11] Li J, 2016, Research on the Cultivation of Higher Vocational Students' Innovation and Entrepreneurship Abilities. Education and Vocation, (13): 86–88.

[12] Dong JX, 2022, Analysis of the Path to Improve Higher Vocational Students' Innovation and Entrepreneurship Abilities. Vocational Technology, 21(10): 60–67.

[13] Wang L, 2020, Research on the Path to Improve Higher Vocational Students' Innovation and Entrepreneurship Abilities. Liaoning Higher Vocational Education, 22(2): 109–112.

[14] Wang D, 2022, Exploration of the Cultivation of Higher Vocational Students' Innovation and Entrepreneurship Abilities in the New Era. Industrial and Science Tribune, 21(13): 270–271.

[15] Zhang H, 2023, Research on the Cultivation of Higher Vocational Students' Innovation and Entrepreneurship Abilities Based on the Concept of School-Enterprise Collaborative Innovation. Teacher, (23): 87–89.

[16] Hou ZJ, 2020, Research on the Cultivation Path of Higher Vocational Students' Innovation and Entrepreneurship Abilities under the Background of Industry-Education Integration. Journal of Innovation and Entrepreneurship Theory Research and Practice, 3(8): 148–149.