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The Promotion of New-Quality Productive Forces Development by Innovation and Entrepreneurship Education in Colleges and Universities

Chenxue Li*

School of Innovation and Entrepreneurship, The University of Shanghai for Science and Technology, Shanghai 200093, China

**Author to whom correspondence should be addressed.*

Abstract: As the core driving force of innovation-driven development, new-quality productive forces play a crucial role in advancing the development and progress of the modern economy and society. Their construction and development cannot be achieved without the support of new-type top-notch innovative talents. As the main force in cultivating such talents, colleges and universities should attach importance to the organic integration of innovation and entrepreneurship education with new-quality productive forces, to better facilitate the development of new-quality productive forces. Based on this, this paper briefly analyzes the two-way driving effect between innovation and entrepreneurship education in colleges and universities and the development of new-quality productive forces, and expounds the practical paths for colleges and universities' innovation and entrepreneurship education to promote the development of new-quality productive forces. The purpose is to give full play to the promoting role of innovation and entrepreneurship education in the development of new-quality productive forces, hoping to provide some references for peers.

Keywords: Colleges and universities; Innovation and entrepreneurship education; New-quality productive forces; Development; Practical path

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1. Introduction

As an important base for gathering and cultivating innovative talents, colleges and universities should base themselves on the development characteristics and requirements of new-quality productive forces, namely "high technology, high efficiency and high quality," and actively carry out reforms and innovations in innovation and entrepreneurship education. In this way, they can cultivate and deliver more new-type top-notch innovative talents for the country and society, so as to better promote the development of new-quality productive forces [1]. Then, in practice, how should colleges and universities give full play to the advantages of innovation and entrepreneurship education to support the construction and development of new-quality productive forces? This

paper mainly focuses on this question and carries out relevant analysis and research, for reference only.

2. Two-way driving between innovation and entrepreneurship education in universities and the development of new-quality productivity

2.1. Innovation and entrepreneurship education in universities is an important foundation for the development of new-quality productivity

On the one hand, innovation and entrepreneurship education in universities functions to aggregate various innovative resources such as knowledge, technology, and talents, which can often provide sufficient support for the development of new-quality productive forces [2]. Essentially, the formation and development of new-quality productive forces reflect the process of improving the quality of production factors and the efficiency of innovative resource allocation [3]. In the practice of innovation and entrepreneurship education, universities can cooperate with governments, enterprises, research institutions, and other innovation entities. Through approaches like "conceptual synergy, demand linkage, and co-construction of activities", they can fully understand the development requirements and market demands of new-quality productive forces. Based on this, universities optimize the content of innovation and entrepreneurship education, strengthen the construction of faculty teams, further realize the exchange, integration, and sharing of resources including knowledge, talents, and technology, and promote the emergence of "new qualities" such as new products, new technologies, and new services, ultimately providing genuine impetus for the development of new-quality productive forces [4].

On the other hand, the implementation of innovation and entrepreneurship education in universities can provide solid innovative strength support for the construction and development of new-quality productive forces from two aspects: talent innovation and technological innovation [5]. From the perspective of "talent innovation", the development of new-quality productive forces has a strong demand for top-notch innovative talents and imposes higher requirements on their capabilities and qualities. Therefore, universities must better meet these talents' high demands for the speed and breadth of knowledge renewal, and focus more on cultivating their innovative literacy, interdisciplinary capabilities, international vision, cooperation skills, and interdisciplinary competencies [6]. Under such circumstances, the development of innovation and entrepreneurship education in universities should not be limited to alleviating the issue of "difficult employment" for college students. Instead, it should be guided by the needs of national development strategies. By guiding students to learn innovation and entrepreneurship theories and providing guidance for their innovation and entrepreneurship practices, universities can continuously enhance students' innovative thinking, innovative spirit, and innovation and entrepreneurship capabilities, thereby providing sufficient talent support for the development of new-quality productive forces. From the perspective of "technological innovation", according to data released by the National Bureau of Statistics, in 2023, the added value of China's "three new" economies (centered on new industries, new business forms, and new business models) reached 22.3528 trillion yuan, an increase of 6.4% compared with 2022, accounting for 17.73% of the gross domestic product (GDP), which was 0.37 percentage points higher than in 2022 [7]. It is evident that in China's current economic transformation process, "new qualities" such as new technologies, new industries, and new businesses have become the "new engine" of China's economic growth [8]. By carrying out innovation and entrepreneurship education, universities can greatly improve the transformation rate of scientific and technological achievements, strengthen the supply of original scientific and technological achievements, thereby incubating more innovation and entrepreneurship projects that can adapt to the development of current social and market demands, spawn more emerging industries, provide "gateway" support

for the effective connection between technological innovation and industrial innovation, and ultimately offer sustained technological support and innovative impetus for the development of new-quality productive forces [9].

2.2. The development of new-quality productive forces can promote the reform of innovation and entrepreneurship education in universities

On the one hand, as a core driving force leading the development of emerging industries and future industries, the development of new-quality productive forces puts forward higher new requirements for the implementation of innovation and entrepreneurship education in universities. Under such circumstances, universities must strengthen the reform of innovation and entrepreneurship education, reconstruct talent training objectives, teaching implementation plans, and curriculum systems, and attach importance to improving the capabilities and qualities of faculty teams. Only in this way can they align with new-quality productive forces and jointly contribute to national and social development.

On the other hand, the social productive forces utilized by people vary across different eras. Consequently, the corresponding talent training objectives of universities will inevitably change, which in turn exerts an impact on educational content, methods, and resources. As a new type of social productive force based on industrial transformation and technological innovation in the new era, new-quality productive forces have a subversive and comprehensive impact on innovation and entrepreneurship education in universities. The development of new-quality productive forces mainly relies on a new generation of scientific and technological means, such as artificial intelligence, big data, cloud computing, and quantum computing, emphasizing the use of various cutting-edge technologies to promote economic and social development and the transformation of modern industries [10]. Therefore, universities' innovation and entrepreneurship education needs to rely on cutting-edge technologies such as big data and artificial intelligence to strengthen its own innovation, thereby making education more precise and personalized, and further improving the school's school-running model, management system, and guarantee mechanism to better adapt to the development requirements of new-quality productive forces. From this perspective, the development of new-quality productive forces is undoubtedly an important internal driving force for promoting the digital transformation of innovation and entrepreneurship education in universities.

3. Practical paths for university innovation and entrepreneurship education to promote the development of new-quality productivity

3.1. Optimize the allocation of innovation resources and improve the "Coupling Degree" of innovation resources

In the process of carrying out innovation and entrepreneurship education, universities can better stimulate the vitality of innovative industries by strengthening the optimal allocation of innovation resources, which helps to further improve the "coupling degree" of innovation resources, thereby laying a solid foundation for the construction and development of new-quality productivity.

Specifically, universities can start from the following two aspects: On the one hand, considering that innovation and entrepreneurship education is a large systematic project, it cannot be separated from the joint participation of multiple subjects such as the government, social organizations, enterprises, and research institutions [11]. Based on this, universities must adhere to the principle of "seeking common ground while reserving differences" in the integration of innovation resources for innovation and entrepreneurship education to ensure that educational goals are always "in the same frequency". In terms of "seeking common ground",

universities need to fully recognize the common development characteristics of these subjects and build good cooperative relationships based on these commonalities. In terms of "reserving differences", all subjects should give full play to their respective advantages in education and resources to jointly contribute to the reform of innovation and entrepreneurship education, thereby achieving the goal of promoting the high-quality development of new-quality productivity. For example, universities can provide knowledge and talent resources; enterprises can offer technical and financial support; and the government can provide policy guarantees. In this way, relying on the full cooperation of multiple subjects, the optimal allocation of innovation resource elements can be better realized, resource sharing and complementary advantages can be achieved, and more guarantees can be provided for the cultivation of students' innovative thinking, interdisciplinary capabilities, and innovation and entrepreneurship capabilities, thus providing more sufficient talent and technical support for the development of new-quality productivity.

On the other hand, universities need to actively build an innovation and entrepreneurship information sharing platform relying on modern technical means, and encourage all subjects to actively share information such as market demand, industry development trends, and industry technological achievements on this platform, to promote the co-construction and sharing of innovation resources, thereby providing more practical innovation and entrepreneurship information and educational resources for "teachers' teaching" and "students' learning"[12]. This can greatly increase the probability of students' success in innovation and entrepreneurship, enabling them to better contribute their wisdom and strength to the development of new-quality productivity. In this process, universities need to establish a sound supervision mechanism to scientifically supervise and evaluate the innovation resources uploaded by various subjects, to prevent teachers and students from obtaining some low-quality resources that may restrict students' learning and future development.

3.2. Adhere to the orientation of market demand and improve the "Concentration" of innovative talents

"Talent cultivation" is the foundation and key to promoting the development of new-quality productivity. The formation and development of new-quality productivity cannot be separated from the support and guarantee of talent resources. Although it takes scientific and technological innovation as the engine and industrial transformation as the carrier, these are always inseparable from the direct role of "people". Therefore, university innovation and entrepreneurship education must adhere to market demand as the basic orientation, focus on issues such as "what kind of people to cultivate, how to cultivate people, and for whom to cultivate people", and further improve the "concentration" of innovative talents, to deliver more innovative talents for the development of new-quality productivity[13].

First of all, from the perspective of new-quality productivity, university innovation and entrepreneurship education needs to update teaching concepts in a timely manner, attach importance to the comprehensive cultivation of core qualities of innovative talents such as students' innovative awareness, innovative spirit, innovation and entrepreneurship capabilities, cooperation capabilities, practical capabilities, management capabilities, digital capabilities, international vision, cross-cultural communication capabilities, and social responsibility, to promote the coordinated development of students' knowledge, capabilities, and qualities[14].

Secondly, universities need to strengthen the training of innovation and entrepreneurship teachers, effectively improve the professional level and digital literacy of teachers, and at the same time encourage them to actively integrate advanced cutting-edge technology theoretical knowledge and skill applications into innovation and entrepreneurship education activities, and require them to actively adopt various teaching methods such as

school-enterprise cooperation, blended teaching, project-driven teaching, and innovative practice, so as to better cultivate students into innovative talents needed for the development of new-quality productivity.

Finally, universities also need to increase investment in the construction of digital infrastructure to provide sufficient basic guarantees for the digital transformation of innovation and entrepreneurship education, thereby better ensuring the effect of innovative talent cultivation.

3.3 Emphasize the transformation of technological achievements and increase the "Density" of scientific and technological achievements

Scientific and technological innovation is an important foundation for the development of new productive forces. Therefore, in carrying out innovation and entrepreneurship education, universities need to attach importance to the effective transformation of key core technologies, to continuously improve their original innovation capabilities. This will better promote the implementation and development of new industries, new technologies, and new services, and ultimately, truly empower the rapid development of new productive forces.

On the one hand, universities need to actively guide teachers and students to learn advanced cutting-edge key core technologies, such as autonomous driving, chip research and development, and biomedicine—technologies that are highly compatible with the current industrial structure and can be implemented in the short term. At the same time, they should set up corresponding scientific research projects, research competitions, or organize academic exchange activities, and encourage teachers and students to conduct in-depth exploration and research on new technologies and new industries. This creates favorable conditions for scientific and technological innovation, thereby contributing to the development of new productive forces [15].

On the other hand, before launching innovation and entrepreneurship education, universities need to conduct in-depth research in industry markets to fully understand the current needs of the industrial sector and future development trends. Based on this, they should encourage teachers and students to develop innovation and entrepreneurship projects, so as to better promote the transformation of educational achievements. After that, universities can also promote these innovations and entrepreneurship projects to the industrial sector through multimedia platforms, thereby transforming scientific research achievements into practical products or services and providing new ideas for the development of new productive forces.

4. Conclusion

In summary, universities play an important role in promoting the development of new productive forces, and the innovation and entrepreneurship education they carry out plays a key role in the construction and development of new productive forces. Specifically, universities can leverage the advantages of innovation and entrepreneurship education to empower the accelerated development of new productive forces through measures such as: optimizing the allocation of innovation resources to improve the "coupling degree" of innovation resources; adhering to market demand orientation to increase the "concentration" of innovative talents; and emphasizing the transformation of technological achievements to enhance the "density" of scientific and technological achievements.

Disclosure statement

The author declares no conflict of interest.

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