



Global Journal of Engineering Science and Research Management

RESEARCH ON THE DEVELOPMENT PATH OF INNOVATION AND ENTREPRENEURSHIP EDUCATION UNDER THE BACKGROUND OF DIGITAL ECONOMY

JIANG HUAN¹, SUPERVISOR PROF. DR RAEMAH ABDULLAH HASHIM²

¹Students City University Malaysia

²DBA(UUM); MBA (Ohio U); DTA(UITM)

Head of Doctor of Business Administration

HOP DBA APEL Q

University Malaysia

raemah.hashim@city.edu.my

KEYWORDS: Digital economy; Innovation and entrepreneurship; Development path; Universities; Education; Digitization

ABSTRACT

The development and application of the Internet, big data technology, and cloud computing technology have promoted the reform and innovation of social production and life. At the same time, society has entered the digital economy era, and the use of new generation information technology such as the Internet to carry out work has gradually become the main way of work in contemporary times. In the context of the digital economy, the demand and standards for innovative and entrepreneurial talents in society are constantly increasing, which puts forward higher requirements for higher education and teaching work.

Based on this, explore and research the development path of innovation and entrepreneurship education in universities under the background of the digital economy, and construct a digital innovation and entrepreneurship education model to further improve the effectiveness of innovation and entrepreneurship education in universities.

INTRODUCTION

In the era of the digital economy, the demand for innovation capabilities from both nations and businesses is continuously increasing. Universities are expected to implement policies related to innovation and entrepreneurship, integrating them into the professional education of students, providing comprehensive training, and enhancing students' innovation and entrepreneurship abilities. This approach lays a foundation for lifelong development. However, some current university innovation and entrepreneurship education systems are still lacking, needing to be aligned with the demands of the digital economy. It is essential to provide a favorable innovation and entrepreneurship environment for students, enhancing their innovation and entrepreneurship skills.

1. Digital Economy and University Innovation and Entrepreneurship Education

The digital economy is an economic concept that has become a major economic form with the rapid development of digital technology and the internet. It is not a virtual economy; rather, it is formed through processes involving the collection, identification, selection, filtering, storage, and use of various digital knowledge and information with the help of big data and internet technologies. The digital economy has realized the rapid optimization and regeneration of resources, constructing a high-quality economic development model that promotes productivity. Typically, the digital economy is also understood as "digital industrialization" + "industrial digitization." It is the product of the development of digital technologies, providing a significant driving force for economic development. Today, digital technologies are widely applied in production, life, and learning. Digital resources are key elements in these applications. Based on digital resources and with information networks as a carrier, the effective integration of information technology with production, management, and other tasks has revolutionized production and living methods and improved work efficiency. It has also driven the global economic structural transformation, providing an important driving force for China's economic development.

2. Current Status and Issues of University Innovation and Entrepreneurship Education in the Digital Economy

2.1 Current Status of University Innovation and Entrepreneurship Education



Global Journal of Engineering Science and Research Management

Universities mainly carry out innovation and entrepreneurship education in the following ways: First, by linking professional knowledge to practical applications. In addition to teaching core professional knowledge, relevant content related to the profession is integrated into the curriculum, utilizing project-based learning to encourage students to think independently and collaborate, thus promoting the development of students' creative thinking, teamwork, and adaptability [2]. Second, by fostering entrepreneurial skills. During professional and technical teaching, universities not only focus on developing students' knowledge and skills but also offer elective courses in economics and management, and adopt the school-enterprise collaborative teaching model. This helps students understand job processes and enhances craftsmanship and management concepts, contributing to entrepreneurial skill development. Third, by combining scientific research with education. Scientific projects and activities are integrated into professional textbooks and teaching activities. By participating in research projects, students gain insight into the latest professional trends and technologies, which is crucial for fostering creativity. Fourth, by using elective courses. Through a combination of professional and elective courses, students are provided with multiple learning directions based on their interests, enhancing both theoretical knowledge and skills to lay a foundation for innovation and entrepreneurship.

The development of innovation and entrepreneurship education in universities has laid a foundation for improving students' innovation and entrepreneurship abilities. However, the actual implementation is still influenced by factors such as the university's teaching conditions, teachers' awareness of innovation and entrepreneurship education, and students' employment consciousness, leaving some challenges to be addressed.

2.2 Issues in University Innovation and Entrepreneurship Education

An investigation into the current status of innovation and entrepreneurship education in universities reveals that some universities still have outdated educational concepts. In the process of education and evaluation, there is a primary focus on academic performance, with little integration of innovation and entrepreneurship ability training, leading to a lack of effective development of students' comprehensive skills and abilities. This is a major reason behind the insufficient innovation and entrepreneurship capabilities of current college students. Furthermore, some universities lack effective guidance on innovation and entrepreneurship, and the education system is overly formalistic, leaving students' employment attitudes, innovative capabilities, and entrepreneurial awareness unaddressed. Additionally, under the background of the digital economy, there is insufficient application of digital technologies, internet platforms, and other modern educational technologies, causing the educational model to lag behind. This impacts the cultivation of students' professional knowledge and skills, and limits the progress of innovation and entrepreneurship education. Students' employment perspectives are also out of sync with the demands of the digital economy. Due to traditional employment views and environmental influences, some students have an inadequate self-awareness and understanding of current employment trends, despite possessing professional knowledge and skills.

Teachers also lack awareness of innovation and entrepreneurship education. For a long time, university teachers have adhered to relatively fixed teaching concepts and models. Some of them have outdated knowledge systems and lack skills in applying information technologies, preventing them from imparting advanced work ideas and technologies to students. Moreover, some teachers do not focus on guiding students' innovation and entrepreneurial abilities, resulting in graduates who do not meet the needs of the digital economy.

3. Paths for Enhancing University Innovation and Entrepreneurship Education in the Digital Economy

3.1 Creating a Favorable Innovation and Entrepreneurship Education Atmosphere

In the context of the digital economy, China has increasingly focused on university education and issued policies like the "Implementation Opinions on Deepening the Reform of Innovation and Entrepreneurship Education in Higher Education Institutions" and "Policy Measures for Promoting Mass Entrepreneurship and Innovation." These documents provide policy support and a favorable environment for the reform and implementation of innovation and entrepreneurship education. Universities have also increasingly recognized the importance of innovation and entrepreneurship education. To promote students' innovation and entrepreneurship abilities, universities must create a good educational atmosphere, enhancing students' enthusiasm for engaging in innovation and entrepreneurship education. First, universities should reform their innovation and entrepreneurship education systems and courses, aligning them with the development trends of various professional fields, student interests, and future needs to lay a foundation for improving students' "double



Global Journal of Engineering Science and Research Management

innovation" capabilities. Second, teachers need to update their educational concepts, recognize the importance of innovation and entrepreneurship education, and innovate teaching models and methods. They should consciously cultivate students' innovative thinking and entrepreneurial awareness during lessons. By updating educational ideas, universities can create a good innovation and entrepreneurship education atmosphere, motivating students to actively engage with innovation and entrepreneurship content, and ultimately achieving the goals of such education. Lastly, universities should optimize innovation and entrepreneurship education by integrating digital technologies, building digital educational platforms, and creating practice environments with businesses, offering students unlimited time and space for learning and providing basic support for innovation and entrepreneurship education.

3.2 Ensuring the Supply-Demand Match of Innovation and Entrepreneurship Education

In innovation and entrepreneurship education, universities should focus on students as the center of the process. They must analyze students' needs regarding innovation and entrepreneurship and set up "double innovation" courses based on students' interests and future development needs, thereby improving the targeted and efficient delivery of innovation and entrepreneurship education. Additionally, universities should collaborate with enterprises to create real innovation and entrepreneurship projects. Strengthening school-enterprise cooperation will both enhance the university education system and innovation and entrepreneurship education processes, helping to develop a unified curriculum standard and model for innovation and entrepreneurship education. This partnership provides universities with additional resources, such as funding, equipment, and technologies, while also offering students opportunities for practical innovation and entrepreneurship activities, contributing to the incubation of innovation and entrepreneurship projects. Furthermore, integrating digital economy content and technologies into innovation and entrepreneurship education, and organizing practical and research activities, will enhance students' application of professional knowledge, innovative capabilities, and entrepreneurial awareness, ensuring that graduates meet the demands of the digital economy.

3.3 Establishing a Sound Evaluation System for Innovation and Entrepreneurship Ability

In the digital economy, the demand for high-quality talent with professional knowledge systems and innovation and entrepreneurship abilities is increasing. Universities, as talent training bases, must shift traditional educational models and focus on cultivating students' innovation and entrepreneurship skills. A sound evaluation system for innovation and entrepreneurship abilities must be established to ensure the successful implementation of such education. When constructing and optimizing this evaluation system, universities should analyze the current state of innovation and entrepreneurship education and build a comprehensive evaluation framework based on students' actual learning situations, thinking capabilities, and other factors. Digital and internet technologies should be utilized to assess students' innovation awareness and abilities, ensuring the successful operation of educational processes and providing a foundation for enhancing students' innovation and entrepreneurship capabilities.

CONCLUSION

The solution to the employment problem of university students requires joint efforts from the government, society, and universities. In the digital economy context, universities must reform traditional educational models, enhance the focus on innovation and entrepreneurship education, optimize the use of information technologies, improve evaluation systems, deepen school-enterprise collaboration, and increase teachers' awareness of innovation and entrepreneurship education. This will ultimately foster students' innovation awareness and entrepreneurial capabilities, laying a foundation for solving students' employment challenges.

REFERENCES

1. Zhao, L., & Xu, S. (2022). The development opportunities, models, and strategies for university students' innovation and entrepreneurship in the digital economy. *China University Students Employment*, 16, 55-64.
2. Zhang, B., & Lü, X. (2022). Research on the evaluation and optimization path of the innovation and entrepreneurship talent development environment in Zhejiang from the perspective of high-quality development. *Science and Technology Management Research*, 42(24), 69-77.
3. Liu, J., Mao, Q., & Ren, J. (2022). Promoting the development of incubation platforms and optimizing the innovation and entrepreneurship environment. *Anhui Science and Technology*, 6, 8-11.
4. Mo, Y. (2021). Challenges and countermeasures in the development of innovation and entrepreneurship



Global Journal of Engineering Science and Research Management

talent. *Marketing Journal*, 31, 42-43.

5. Shao, Y. (2022). Analysis of the optimization path for creating an innovation and entrepreneurship development environment in Fujian Province. *Journal of Taiyuan City Vocational and Technical College*, 4, 9-12.
6. Gu, Y. (2022). The innovative development of university employment and entrepreneurship guidance work in the new media environment. *Heilongjiang Human Resources and Social Security*, 3, 136-138.
7. Hong, X. (2021). Research on countermeasures to optimize the development environment of entrepreneurial talents in universities. *Science and Technology Information*, 19(20), 105-108.
8. Huang, Z., Wu, H., & Jiao, J. (2022). Research on the impact of the innovation and entrepreneurship environment on corporate investment enthusiasm. *Journal of North China University of Water Resources and Electric Power (Social Science Edition)*, 38(6), 34-42.
9. Wang, Z. (2022). Research on the innovation and development of the "double innovation" ecosystem in the Zhengluoxin National Independent Innovation Demonstration Zone. *Regional Economic Review*, 60(6), 112-115.
10. Dao, L. (2022). Research on career planning education for vocational college students under the innovation and entrepreneurship environment. *Science Consultation (Science and Management)*, 11, 60-62.
11. Zhu, R. (2022). The role of government funding support in the innovation and entrepreneurship environment: A case study of Taizhou City. *Modern Enterprise Culture*, 28, 158-160.
12. Li, L., Zhang, M., & Li, H. (2022). An analysis of the construction of an innovation and entrepreneurship environment in agricultural vocational colleges. *Henan Agriculture*, 27, 14-15.
13. Wang, Y., Sun, X., Yang, J., et al. (2022). Analysis of the innovation and entrepreneurship environment in Gansu Province. *Gansu Science and Technology*, 38(17), 39-42, 125.
14. Li, L., & Ma, S. (2022). Analysis and optimization strategy of the innovation and entrepreneurship environment in Gansu Province. *Journal of Lanzhou Vocational and Technical College*, 38(4), 56-58, 75.