

# Research on the development strategy of Higher Education under the digital economy

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### **Abstract**

With the rapid development of information technology and the rise of the digital economy, higher education is facing unprecedented challenges and opportunities. This article aims to explore the development strategies of higher education in the context of the digital economy, analyze the impact of digital technology on higher education, and discuss how to utilize digital technology to reform the higher education system and cultivate talents that are adaptable to the development of the digital economy. This research holds significant theoretical and practical importance, providing valuable insights for reforming higher education systems and talent cultivation.

Keywords: higher education, digital economy, development strategy

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#### 1. Introduction

With the rapid development of information technology and the rise of the global digital economy, various industries are experiencing unprecedented changes, and the field of higher education is particularly prominent. The digital economy is an economic form based on digital technology, the core of which is the use of digital technology to promote the improvement of productivity, the enhancement of innovation and the optimization of economic structure (Wang & Xue 2024). In this context, digital technology has gradually penetrated all aspects of higher education and has had a profound impact on the development of higher education.

The development of the digital economy has created new challenges and opportunities for higher education. On the one hand, digital technology provides new means and opportunities for higher education, making education more convenient, efficient and popular. For example, the popularity of online education provides students with more learning resources and flexible learning methods. The application of big data and artificial intelligence technologies makes education evaluation and management more scientific and accurate. On the other hand, the demand for talent in the digital economy has also changed, bringing new requirements for higher education. Under the background of the digital economy, not only talents with professional skills are needed, but also interdisciplinary knowledge, innovative spirit and practical ability (Zhu & Hu 2024). Therefore, higher education needs innovation and reform in educational content, teaching methods, educational management and other aspects to adapt to the development trend of the digital economy.

# 2. The development status of Higher Education under the background of digital economy

#### 2.1 Digital transformation of Higher Education

Digital technology has undergone rapid development in recent years, and the field of higher education is currently experiencing a period of significant digital transformation. This transformation encompasses a variety of changes, including alterations to teaching content, teaching methods, and educational management. The integration of online education, blended teaching, big data analysis, and other technological tools has progressively become an integral component of higher education. This digital transformation has precipitated numerous positive changes within higher education, including enhanced educational quality, diversified learning channels for students, and the facilitation of educational equity. However, this transformation is concomitant with numerous challenges, including the uneven distribution of educational resources, the digital divide, and network security concerns.



# 2.2 The reform of higher education teaching mode

Under the background of the digital economy, the teaching mode of higher education has also undergone significant changes. Online courses, distance education, blended teaching and other new teaching modes have gradually replaced the traditional face-to-face teaching methods. These new teaching models make education more flexible and diversified, which is conducive to improving students' learning experience and satisfaction. At the same time, personalized teaching and autonomous learning have gradually become the development trend of higher education. Students can choose appropriate learning resources and learning paths according to their interests and needs in the digital environment (Lu et.al 2021). In addition, digital technology can also help colleges and universities optimize the internal management process, improve management efficiency, and provide a strong guarantee for the reform and innovation of education mode.

# 2.3 The transformation of talent training mode in Higher Education

Under the background of the digital economy, the talent training mode of higher education has also undergone important changes. In order to meet the development needs of the digital economy, colleges and universities need to cultivate talents with innovative abilities, interdisciplinary literacy and practical experience. Therefore, many colleges and universities began to adjust the curriculum, strengthen cooperation with the industry, and promote practical teaching and project-based learning. In addition, some colleges and universities also encourage students to actively explore and cultivate their innovative spirit and entrepreneurial ability by carrying out innovation and entrepreneurship education and building students' innovation and entrepreneurship platforms.

#### 2.4 Internationalization of higher education development

In the context of the digital economy, the internationalization of higher education has also achieved remarkable results. The application of digital technology has made it possible for higher education to share and exchange resources across geographical limits. Many colleges and universities have cooperated with foreign colleges and universities by means of online courses and distance education, providing students with international learning opportunities. In addition, colleges and universities have strengthened their cooperation with international universities and research institutes through international academic exchange activities and the establishment of international cooperative research centers, so as to enhance their influence in the field of international higher education.

# ${\bf 3.}\ The\ development\ strategy\ of\ Higher\ Education\ under\ the\ background\ of\ digital\ economy$

#### 3.1 Reform strategy of education system

Government departments should formulate a comprehensive policy framework for digital education, specify the development objectives, key tasks and implementation paths of digital education, and provide policy support and guidance for the digital development of higher education. Strengthen the training of teachers' digital education skills and improve their information literacy and online teaching ability. At the same time, teachers are encouraged to make educational innovations and explore new teaching models in the digital education environment. Promote the integrated development of industry, academia and research, and strengthen the supporting role of universities in scientific and technological innovation and industrial development. Optimize the allocation of research funding, enhance the motivation of researchers and strengthen cooperation with international research.

#### 3.2 Digital and intelligent education strategy

To fully exploit information technology's advantages in education, improve the level of campus informatization, achieve the sharing and utilization of digital resources, and provide support for the innovative development of higher education. Making full use of the Internet, big data, artificial intelligence and other technologies expanding the application scenarios of online education, achieving a balanced distribution of educational resources, and increasing the education penetration rate. Implementing the 'Internet+Education' model, realizing the integration of online and offline development, and encouraging teachers to use multimedia, virtual reality and other technological means to innovate teaching methods and improve teaching effects. Encourage colleges and universities to establish educational resource-sharing mechanisms, break down geographical and disciplinary barriers, and achieve a balanced distribution of quality educational resources. Promote the interconnection of online education platforms to form a unified digital education ecosystem. At the same time, big data and artificial intelligence technologies are used to build an intelligent student evaluation system to achieve the multi-dimensional evaluation of students' comprehensive quality and academic performance, providing a basis for optimizing the teaching process and improving the quality of education.



# 3.3 Strategies for Talent Cultivation

Strengthen the link between practical teaching, combine theoretical teaching with practical teaching, and cultivate students' practical ability and innovative spirit. Promote quality education, integrate students' information literacy education into the education system, improve students' information acquisition, analysis and application ability, cultivate students' comprehensive quality to adapt to the digital era, cultivate students' good moral quality, innovative spirit and practical ability, and provide society with comprehensive quality talents. Establish a school-enterprise cooperation mechanism to promote close cooperation between colleges and enterprises, so that students can better understand the needs of society and improve their employment competitiveness. Strengthen international exchanges and cooperation, introduce world-class educational resources, and cultivate high-quality talents with international vision. At the same time, innovation and entrepreneurship education will be integrated into the talent training system to enhance students' innovation awareness and entrepreneurial ability and contribute more innovative talents to social development.

#### 4. Conclusion

In order to cultivate high-quality talents with the innovative spirit, interdisciplinary knowledge system and practical ability in the era of the digital economy, the government, colleges and universities, enterprises, teachers and students should assume corresponding responsibilities and jointly promote the development of higher education in the era of the digital economy. The government needs to actively formulate policies, increase financial investment, and improve regulations and standards; colleges and universities need to play a leading role in promoting educational innovation and resource sharing; enterprises need to strengthen cooperation with colleges and universities and provide practical teaching support; teachers need to continuously improve their own qualities and act as learning guides; and students need to actively participate in learning and improve their information literacy and comprehensive quality to adapt to the digital era.

Looking forward to the future, the development of higher education will be further intelligent, and the intelligent teaching system will be able to provide personalized learning solutions according to students' learning needs and characteristics. Digital technology will promote the cross-border integration of higher education disciplines and cultivate innovative talents with the interdisciplinary knowledge system. At the same time, in the future, higher education will provide a more flexible learning mode, focus on cultivating students' innovative thinking and practical ability, further realize the sharing of global resources, break down regional and language barriers, and students can easily access international high-quality educational resources, so as to improve their international vision and cross-cultural communication ability.

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