



Cultivation of Financial Technology Talents in Finance and Economics Colleges under the Background of New Liberal Arts

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Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

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ABSTRACT

This research explores how finance and economics colleges can effectively cultivate financial technology talents in the context of the construction of new liberal arts. The research analyzes the challenges faced by current financial and economic colleges in cultivating financial technology talents, such as a single teaching mode and limited practical platforms. It also proposes corresponding training paths, including clarifying training objectives, optimizing curriculum systems, strengthening practical teaching, building a diversified cooperative education system, enhancing faculty building, and international exchange and cooperation. Aiming to cultivate financial technology talents with interdisciplinary abilities, innovative thinking, and international perspectives through reform and innovation, in order to adapt to the rapid development of the financial technology industry.

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1. INTRODUCTION

New liberal arts is a way of breaking the thinking mode of traditional liberal arts, integrating modern information technology into liberal arts courses in the context of the global new technological revolution and new development stage, with inheritance and innovation, intersection and integration, collaboration and sharing as the main approaches, promoting interdisciplinary and deep integration. In November 2020, the New Humanities Construction Work Conference pointed out that further breaking down disciplinary barriers and promoting the integration and development of humanities education and science and technology is an inevitable choice for the construction of new humanities under the dual background of social change and technological development (Chen 2023, Kong 2023, Ma & Wang 2023). In recent years, the technological trends and ecological models of fintech have gradually become clear, which has led to a surge in the demand for talent in the fintech field and also simultaneously promoted the transformation of talent cultivation (Gao et al. 2023). According to the "Report on the Demand and Development of Financial Technology Talents (2021)", based on recruitment demand statistics released by commercial banks, insurance companies, securities companies, and financial technology enterprises, it is expected that the total demand for financial technology talents in the next five years will be about 230000 per year, with a total demand exceeding 1.15 million. More than 90% of financial technology enterprises are facing a serious shortage of financial technology professionals (Sheng & Wang 2023).

The rapid development of financial technology (FinTech) has had a disruptive impact on financial services worldwide and is currently completely changing the entire financial industry (Liu et al. 2022, Sangwan et al. 2020, Abad-Segura et al. 2020). The Chinese government has always attached great importance to the development of the fintech industry, and the layout and development of fintech majors in undergraduate universities is also an inevitable choice for social development (Jiang 2023). In 2022, the People's Bank of China released the "Financial Technology Development Plan (2022-2025)", proposing the vision of "achieving a leapfrog improvement in overall level and core competitiveness" in the development of financial

technology (Zhuo 2023). The acceleration of the digital transformation process in the financial industry requires a large number of financial technology composite talents, who are proficient in financial theory and have good technical literacy in artificial intelligence, big data, blockchain, etc., and will continue to be favored by major financial institutions (Liu et al. 2023). From the perspective of market demand, there is a high requirement for the comprehensive quality of financial technology talents. They should not only keep up with the development of the financial market and the forefront of financial technology, but also master computer programming, data analysis algorithms, and statistical tools. This research is based on the innovation of financial technology talent cultivation mode, guided by the new liberal arts ideology, and constructs an innovative path for financial technology talent cultivation mode under the background of new liberal arts, providing ideas for financial technology talent cultivation and reform.

2. ANALYSIS OF THE DIFFICULTIES IN CULTIVATING FINANCIAL TECHNOLOGY TALENTS IN FINANCE AND ECONOMICS COLLEGES UNDER THE BACKGROUND OF NEW LIBERAL ARTS

2.1 Single Teaching Mode and Weak Innovation Ability

Finance and economics colleges generally face the problem of a single teaching mode in the cultivation of financial technology talents. Traditional teaching methods mainly focus on imparting theoretical knowledge, while neglecting the cultivation of practical abilities. The application rate of interactive teaching methods such as case teaching and situational teaching is generally not high, resulting in students lacking the ability to deal with complex financial problems in practical operations. In addition, the rigidity of teaching methods also hinders the development of students' self-learning ability and analytical thinking ability, making it difficult to cultivate innovative financial technology talents.

2.2 Old Teaching Facilities and Limited Practical Training Platforms

With the rapid development of financial technology, teaching facilities and equipment

need to be constantly updated to meet new teaching needs. However, many finance and economics colleges face the problem of outdated teaching facilities and limited practical training platforms. The purchase of new equipment often lacks foresight, resulting in a mismatch between the number of existing equipment and teaching needs. At the same time, due to the limited guidance of simple professional knowledge in practical teaching, students find it difficult to gain a deep understanding of their major, which affects the quality of practical teaching. Although some universities have established financial engineering laboratories, the degree of effective utilization by students is not high, and off campus internships are difficult to access core technical operations, further limiting the improvement of students' practical abilities.

2.3 Unreasonable Course Design, Mismatch between Students' Knowledge and Ability Needs

The financial technology major has a high degree of interdisciplinary nature, requiring students to have certain abilities in mathematical operations, computer programming, and theoretical foundations of finance. However, finance and economics colleges often lack targeted curriculum design, resulting in a mismatch between students' professional knowledge and ability needs and curriculum offerings. For example, courses related to big data and financial technology often exist as elective courses and have not received sufficient attention from students. At the same time, many courses involve content that is rarely used in practical work, and students' learning enthusiasm is not high, making it difficult to apply the knowledge they have learned to practical work.

2.4 Lack of Practical Experience among Teachers and Weak Teaching Staff

The cultivation of financial technology talents requires a team of teachers with rich practical experience and innovative abilities. However, currently many teachers in finance and economics colleges lack practical experience, making it difficult to impart the latest financial technology trends and practical operational experience to students. This leads to a disconnect between teaching content and actual needs, and students lack competitiveness in the job market. In addition, some teachers have insufficient understanding of new technologies and applications in the field of financial

technology, and are unable to provide effective guidance and support for students.

2.5 The Disconnect between Market Demand and Talent Cultivation

With the rapid development of financial technology, the demand for financial technology talents in the market is constantly changing. However, finance and economics colleges often lag behind changes in market demand in talent cultivation. On the one hand, some universities have failed to adjust their curriculum and teaching methods in a timely manner to adapt to changes in market demand; On the other hand, the cooperation between universities and enterprises is not close enough, and there is a lack of effective mechanisms for the integration of industry and education. This makes it difficult for students to adapt to market demand and face employment difficulties after graduation.

2.6 Lack of International Perspective and Competitiveness

In the context of globalization, the cultivation of financial technology talents requires an international perspective and cross-cultural communication skills. However, currently many finance and economics colleges lack an international perspective in cultivating fintech talents, and their curriculum and teaching methods are not highly in line with international standards. This results in students lacking competitiveness in the international market and struggling to adapt to the globalized financial environment.

In summary, under the background of the new liberal arts, the cultivation of financial technology talents in finance and economics colleges faces multiple challenges, such as a single teaching mode, outdated teaching facilities, unreasonable curriculum design, insufficient practical experience of teachers, disconnect between market demand and talent cultivation, and insufficient international perspective. In order to cultivate fintech talents with innovative capabilities and international competitiveness, finance and economics colleges need to continuously explore and improve talent training methods, strengthen practical teaching and school enterprise cooperation, enhance teachers' practical experience and teaching level, and pay attention to cultivating students' international vision and cross-cultural communication skills.

3. ANALYSIS OF THE PATH OF FINANCIAL TECHNOLOGY TALENT CULTIVATION IN FINANCE AND ECONOMICS COLLEGES UNDER THE BACKGROUND OF NEW LIBERAL ARTS

3.1 Clarify Training Objectives and Update Educational Concepts

Finance and economics colleges should clarify the training objectives of financial technology talents, update educational concepts, and adapt to the rapid development of financial technology. The training objectives should emphasize the cultivation of compound, innovative, and applied talents, and focus on improving students' professional competence, technical ability, and comprehensive quality. At the same time, universities should focus on local practice and innovation of economic and financial theories, while enhancing their international perspective and cultivating more new financial talents who are familiar with international rules and have a strong sense of patriotism.

3.2 Optimize the Curriculum System and Strengthen Cross Integration

In terms of curriculum system, finance and economics colleges should pay attention to the cross integration of financial technology and other disciplines, and build a comprehensive, hierarchical, and innovative curriculum system. The curriculum should cover multiple fields such as finance, computer science, mathematics, and information technology, with a focus on cultivating students' ability to operate new technologies such as big data, cloud computing, data mining, and machine learning. At the same time, universities should develop corresponding curriculum systems for data mining, credit assessment, risk assessment, etc., to achieve the organic combination of financial knowledge and technological capabilities.

3.3 Strengthen Practical Teaching and Enhance Application Ability

Practical teaching is an important part of cultivating financial technology talents. Finance and economics colleges should strengthen cooperation with financial institutions and technology enterprises, establish professional demonstration internship bases, and cultivate distinctive and competitive financial talents

through school enterprise cooperation and collaborative education. In addition, universities can organize fintech skill competitions and carry out activities such as bringing "new finance" knowledge into communities, campuses, and rural areas to enhance students' practical and innovative abilities.

3.4 Building a Diversified Cooperative Education System

Finance and economics colleges should establish a more efficient, harmonious, and flexible cooperation model, and innovate the cooperation and education mechanism between universities and various sectors. By jointly building financial technology laboratories, research centers, and industry colleges with various parties in society, we aim to achieve cooperation and integration between industry, academia, and research, and improve the efficiency and quality of universities in serving local economic and financial industry development. At the same time, universities can explore joint revisions of talent training programs with regions and industries, develop new financial courses, and jointly build internship and training bases to promote talent training that better meets market demand.

3.5 Strengthening the Construction of the Teaching Staff and Improving the Teaching Level

The cultivation of financial technology talents requires a team of teachers with rich practical experience and innovative abilities. Finance and economics colleges should strengthen the construction of their teaching staff, improve their teaching level and innovation ability by introducing teachers with practical experience and strengthening teacher training. At the same time, universities can encourage teachers to participate in the research and development of financial technology projects, enhance their research abilities and technical skills, and better guide students in learning and practice.

3.6 Strengthening Exchanges and Cultivating Perspective International Cooperation, an International

In the context of globalization, finance and economics colleges should strengthen communication and cooperation with

international financial institutions, universities, and research institutions to cultivate students' international perspectives and cross-cultural communication abilities. By organizing students to participate in international conferences, competitions, and other activities, we aim to enhance their international competitiveness. At the same time, universities can introduce internationally advanced financial technology courses and teaching resources, promote cooperation with international financial institutions, and provide students with more international internship and employment opportunities.

3.7 Strengthen Risk Management Education and Cultivate Risk Awareness

The field of financial technology has high risks, so financial and economic colleges should strengthen risk management education and cultivate students' risk awareness when cultivating financial technology talents. By offering risk management related courses and organizing risk case studies, students can understand the risk points and prevention measures of financial technology, and improve their ability to cope with risks.

In summary, under the background of the new liberal arts, the training path for financial technology talents in finance and economics colleges needs to clarify training objectives, optimize curriculum systems, strengthen practical teaching, build a diversified cooperative education system, strengthen the construction of teaching staff, enhance international exchanges and cooperation, and strengthen risk management education. Through the implementation of these measures, financial technology talents with interdisciplinary abilities, innovative thinking, and international perspectives can be cultivated, providing strong talent support for the rapid development of financial technology.

4. CONCLUSION

In the context of the new liberal arts, the research on cultivating financial technology talents in finance and economics colleges is not only an innovation of traditional education models, but also a positive response to the future development trend of the financial industry. Through the discussion in this research, we deeply realize that the cultivation of financial

technology talents requires interdisciplinary knowledge systems, practice oriented teaching models, and an international perspective. Finance and economics colleges should keep up with the pace of the times, continuously optimize their curriculum system, strengthen practical teaching, enhance the construction of their teaching staff, and broaden international communication and cooperation channels, in order to cultivate compound talents who understand both finance and technology. In the future, with the continuous development and innovation of financial technology, finance and economics colleges will face more challenges and opportunities in cultivating financial technology talents. We look forward to exploring more efficient and scientific talent cultivation paths through continuous research and practice, contributing more to the transformation and upgrading of the financial industry and the economic development of the country.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

The author hereby declares that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

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COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES

- Abad-Segura, E., González-Zamar, M.-D., López-Meneses, E., & Vázquez-Cano, E. (2020). Financial technology: Review of trends, approaches, and management. *Mathematics*, 8, 951. DOI: <https://doi.org/10.3390/math8060951>
- Chen, Y. (2023). Exploring the talent cultivation path of "Finance + Technology" under the background of new liberal arts. *Marketing Industry*, 16, 77-79.

- Gao, Z., Zhang, X., & Yu, T. (2023). Construction of core competency system for financial talents under the background of financial technology. *China Management Informatization*, 26(5), 224-227.
- Jiang, J. (2023). Research on talent cultivation strategies for financial technology majors in higher education institutions. *Financial Customer*, 1, 7-9.
- Kong, W. (2023). Reflection and exploration on integrating ideological and political education into the construction of the new liberal arts experimental teaching system. *Journal of Innovation and Development*, 4, 52-57.
- Liu, G., Ding, X., & Wang, Y. (2022). Research on the training model of financial talents in applied undergraduate universities under the background of financial technology. *Journal of Jilin University of Chemical Technology*, 39(12), 21-25.
- Liu, J., Jiang, H., & Liu, J. (2023). Research on optimizing the talent training program for finance majors under the background of financial technology. *Tech Wind*, 29, 23-25.
- Ma, X., & Wang, Z. (2023). The current situation and problems analysis of new finance talent training in private universities in Guangdong Province. *Journal of Human Resource Development*, 5, 17-25.
- Sangwan, V., Prakash, P., & Singh, S. (2020). Financial technology: A review of extant literature. *Studies in Economics and Finance*, 37, 71-88.
- Sheng, T., & Wang, Y. (2023). Trends, mode comparison, and suggestions for talent cultivation in financial technology major. *Chinese University Teaching*, 4, 18-24.
- Zhuo, Y. (2023). Research on modern financial talent cultivation and university financial teaching reform under the background of technology finance. *Investment and Cooperation*, 9, 196-198.

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