

# Cultivating Innovative Financial Talents in the New Era through Characteristic Courses Construction

Guangxian Zhang<sup>1</sup>

<sup>1</sup> School of Finance, Shandong University of Technology and Business, Yantai, Shandong 264005, China

## ABSTRACT

Technological innovation, social development, and new changes in the financial industry have put forward new requirements for the cultivation of financial talents in universities. To closely connect with the demand for talent in society, universities should clarify the positioning of financial talent cultivation from three aspects: compound, applied, and distinctive. They should systematically summarize the experience of financial talent cultivating and identify the problems they face. Courses are the core of talent cultivation and courses construction is an important lever for educational and teaching reform. Universities should take the construction of characteristic courses as the starting point, promote interdisciplinary integration, strengthen the combination of industry, academia, and research, leverage the traditional advantages of local and university, and cultivate compound, applied, and distinctive financial talents in the new era.

**Keywords:** *Financial talent cultivation, Compound talents, Construction of characteristic courses.*

## 1. INTRODUCTION

Currently, new science and technology are emerging endlessly, and technological innovation is driving industrial transformation and upgrading, rapidly forming new quality productive forces. With the leap of social productivity, there have been significant changes in social production relations and people's lifestyles. The ownership structures have become more diverse, production organization forms have become more diverse, labor capital relations have become more flexible, and distribution methods have become more diverse. People's clothing, food, housing, transportation, social entertainment, consumption concepts, etc. are greatly different from before, and diversification and personalization have become the norm. The financial services and modern financial industry have undergone significant changes to adapt to technological innovation and social development. The rapid advancement of financial technology applications, coupled with emerging technologies such as artificial intelligence, big data, and blockchain, has given rise to new financial formats and business models, greatly improving the efficiency and convenience of financial services. Green finance is more valued, and the role of

finance in addressing climate change, promoting low-carbon economy, and sustainable development is more evident. The development of inclusive finance is rapid, the coverage of finance is constantly expanding, and the availability and convenience of financial services are constantly improving.

The new changes in social development and the financial industry not only provide broader employment and development opportunities for financial talents, but also put forward new and higher requirements. Grassroots service personnel in the financial industry are facing career transformation, with a slowing down or even absolute decrease in the demand for traditional financial service talents, and a shortage of emerging financial service talents. There is a serious shortage of high-quality financial talents with rich financial knowledge, management skills, and innovative awareness. There is a strong demand for financial talents who are proficient in using new technologies such as data analysis, artificial intelligence, and big data. There is a shortage of characteristic talents who are familiar with emerging industry businesses and can provide targeted financial services based on specific scenarios. Universities need to adapt to the needs of technological, economic, and social

development, innovate talent cultivating models, and cultivate compound, applied, and distinctive new era financial talents.

Many scholars have conducted research on the demand and cultivation of financial talents in the new era from different perspectives. Hu Rui, Chen Xinzhong, and Xue Shan (2012) analyzed the issue of interdisciplinary integration in universities using MIT as an example. Zheng Jun and Sun Minghao (2019) analyzed the practical difficulties faced by finance majors in terms of professional positioning deviation, imperfect discipline layout, imbalanced curriculum system, and disconnection between talent supply and demand based on the background of the "New Economic Management" strategy. Ge Heping and Lu Minfeng (2021) suggested building a financial discipline system with financial technology as the core, and setting up a reasonable curriculum system for the financial discipline. Zhou Fangzhao, Fu Hui, He Zhifang et al. (2021) pointed out that the traditional single financial discipline cultivating system is difficult to cultivate professional talents that are needed to adapt to the digital transformation and development of the financial industry in the new era. Fu Bing (2022) analyzed the application of dual bachelor's degree programs and joint bachelor's degree programs in the integration and development of computer science and technology+finance majors. Li Zhe, Yi Zhigao, and Cheng Chunlin (2023) proposed that there is an urgent need for cross disciplinary talents in China's financial field who have a deep understanding of future financial business scenarios and master information technology. Ye Nan (2023) conducted a case study on green finance degree programs at the University of Edinburgh, the National University of Singapore, and the Norwegian Business School in the UK. Gao Zhongpo, Zhang Xinjian, and Yu Tianqi (2023) believed that the rapid development of financial innovation driven by new information technology has put forward new requirements for the cultivation of financial talents. Wang Zhenzhen and Liu Jiaxun (2023) conducted a study on the cultivating objectives, cultivating specifications, and curriculum system of applied economy and finance talents from the perspective of "blockchain+finance". Pu Zhenhuan (2023) suggested establishing a multi type, multi-level, multi-channel, and all-round logistics and financial technology talent cultivating system.

This article takes into account technological innovation, social development, and new changes in the financial industry in the new era, and

considers the practice of cultivating financial talents in Chinese universities. It constructs an analytical framework from three dimensions: compound, applied, and distinctive, summarizes the consensus formed in the cultivation concept, sorts out the accumulated experience in reform and innovation, and analyzes the problems encountered in the actual promotion process. It is suggested that the construction of characteristic courses should be taken as the starting point, it is promoted that interdisciplinary development should foster the complexity of financial talents, it is strengthened that the combination of industry, academia, and research should enhance the applicability of financial talents, and it is showcased that the distinctive characteristics of financial talents should be highlighted by leveraging the local characteristics and traditional advantages of universities.

## **2. ANALYSIS OF THE CURRENT SITUATION OF FINANCIAL TALENTS CULTIVATION**

Chinese universities have made beneficial explorations in the cultivation of financial talents to adapt to social needs and changes in the financial industry, formed a certain consensus and accumulating rich experience. However, they inevitably face some new problems.

### ***2.1 New Consensus on Financial Talent Cultivating***

Firstly, it is necessary to cross disciplinary and cultivate compound financial talents. Modern finance involves multiple fields such as economics, management, mathematics, engineering, and computer science. Financial practice serves different types of industries, enterprises and institutions, and individuals with distinct needs and personalities. The knowledge of a single discipline cannot reflect the development trend of the financial discipline and cannot adapt to the increasingly diverse financial practices. There are significant differences in the thinking patterns and methodologies of different disciplines. Through interdisciplinary integration, the concepts, knowledge, and methods of different disciplines can be integrated, which helps to stimulate innovative thinking in talents and cultivate compound financial talents with innovative spirit and ability.

Secondly, it is necessary to strengthen the combination of industry, academia, and research, and cultivate applied financial talents. In talent cultivation, the combination of industry, academia, and research is an effective measure to achieve the combination of theoretical knowledge and practical application. Universities, research institutions, and financial institutions each have different advantageous resources. By the combination of industry, academia, and research, the allocation of education resources, research resources, and industrial resources is optimized, resource sharing and complementary advantages are achieved, the integration of financial theoretical knowledge, research methods, and rich practical scenarios is achieved. These practices help college students understand the operating mechanism and business needs of the financial industry, and actively learn theoretical knowledge in combination with financial practice, so as to cultivate applied financial talents with both solid theoretical foundations and practical operational abilities.

Finally, it is necessary to rely on local and university advantages to cultivate distinctive financial talents. From the reality, compound and applied financial talents are inevitably distinctive financial talents. There are significant differences in the quality, abilities, and knowledge structure of different types of compound and applied financial talents. There are differences in the level of economic and financial development and industrial structure in different regions, as well as differences in people's lifestyle and cultural customs. Financial talents cultivated by universities should understand the local economic and financial development situation, master knowledge and skills related to local economy and culture. Different universities have differences in educational philosophy, disciplines and majors, and faculty structure, and naturally have different characteristics and advantages in cultivating financial talents. In the process of cultivating compound and applied talents, universities should combine local needs and rely on universities' traditional advantages to form differentiated and distinctive talent cultivating models, and cultivate financial talents that meet the needs of local economic and financial development and demonstrate the universities' advantages and characteristics.

## ***2.2 New Exploration of Financial Talent Cultivating***

The first is the exploration in interdisciplinary areas. From the perspective of the integration of traditional disciplines, there is mainly the integration of finance and management, statistics, computer science, law, sociology, psychology, and so on. For example, the integration of finance and management studies aims to cultivate compound talents who understand both finance and management in areas such as financial risk management, corporate governance, and investment decision-making. The integration of finance and mathematics and statistics, aims to introduce quantitative analysis tools, and cultivate the ability of college students to use mathematical modeling and data analysis methods to solve financial problems. In emerging fields, the intersection and integration of finance and different disciplines are developing rapidly. For example, the cross integration of finance, data science, and artificial intelligence aim to introduce big data and artificial intelligence, and cultivate compound financial talents in fields such as risk assessment, investment decision-making. The cross integration of finance and blockchain technology cultivates compound financial talents in fields such as digital currency, smart contracts, and supply chain finance. The cross integration of finance and sustainable development aims to cultivate compound financial talents in fields such as climate finance, green finance, low-carbon finance, corporate social responsibility, and ESG investment. The cross integration of finance and medical care aims to cultivate compound financial talents in fields such as health investment and financing, pension finance, and biotechnology innovation. In addition, the cross integration of finance and creative design, marine economy, modern logistics, social work, and other related fields cultivates compound financial talents.

The second is exploring the integration of industry, academia, and research. There are many forms of cooperation between universities, research institutions, and related enterprises. For example, by establishing university-industry cooperative internship base, universities help students to learn and apply financial knowledge in a real work environment, and enhance practical abilities. By jointly establishing research and development projects, universities cultivate students' innovative abilities and teamwork spirit. By jointly developing and promoting financial case teaching, universities enhance students' ability to analyze and solve

problems. By inviting academic and industry experts to hold lectures and seminars to share the latest financial trends and scientific research progress, universities help students to broaden their horizons and engage in the forefront of finance. By integrating courses and certificates, universities help students to obtain a financial certificate by taking relevant certification exams while completing their course studies.

The third is the exploration in the cultivation of characteristic talents. The cultivation of characteristic financial talents in universities is to cultivate talents demanded by local and industry, and build talents cultivation brands by everaging the traditional strengths of university disciplines and majors, and through interdisciplinary integration, industry-university-research cooperation, and other methods. Some universities focus on building a distinctive financial curriculum system, offering forward-looking courses such as fintech, green finance, and quantitative investment. Some universities focus on strengthening practical teaching and jointly building financial laboratories. Some universities focus on improving the industry mentor system and hiring senior professionals to provide professional guidance and career planning advice for students. Some universities, in combination with the overall positioning of the university, have initially formed distinctive talent cultivating brands in marine finance, logistics finance, technology finance, green finance, and financial social work so as to closely connect with financial sub-industries, emerging industries, and other industries related to finance.

### ***2.3 New Problems Faced by Financial Talent Cultivating***

Firstly, there are problems in interdisciplinary integration. In the new era, the role of finance in economic and social development is becoming more prominent. The demand for financial talents in society has broken through the limitations of traditional financial services. More and more college students majoring in finance are seeking employment in new financial institutions, or in related businesses outside the financial industry. Some universities lack a strong awareness of "big finance", and interdisciplinary integration are merely formalistic. They overly emphasize the mastery and application of professional financial knowledge and skills, and do not attach enough importance to the cultivation of financial thinking and financial literacy. The curriculum of some

universities is not scientific enough, and traditional finance courses are still the main focus. They do not fully utilize the advantages and resources of other disciplines. Some universities mainly adopt measures such as minor courses and double degrees to promote interdisciplinary development, without delving into talent cultivating programs and course content. Some universities mainly promote interdisciplinary integration by introducing courses from other disciplines, which is manifested as a simple accumulation of courses from different disciplines in talent cultivation programs, without truly integrating from the perspective of talent cultivation needs.

Secondly, there are problems in the integration of industry, academia, and research. Due to insufficient cooperation resources, low levels of cooperation institutions, and a lack of long-term and stable cooperation, some universities have traditional and single content of industry university research cooperation, which lacks coherence. Due to differences in cultural background, value orientation, management philosophy, and other aspects between universities and their partners, some universities have encountered cultural conflicts and conceptual collisions in cooperation, which have affected the smooth progress and actual effectiveness of cooperation. Due to the unique nature of the financial industry, some universities lack sufficient depth of cooperation, and the forms of cooperation mainly remain at the level of visits and internships. Students find it difficult to delve into frontline work and have access to and understand of actual financial business operations.

Finally, there are problems in cultivating distinctive talents. Some universities have unclear positioning, weak awareness of meeting the demands of local economic and social development, insufficient exploration of their disciplinary and professional advantages, and lack of practical and feasible plans. Some universities have rigid educational models, overly emphasize uniformity and standardization, and teaching according to individual needs is just a slogan, the specific methods of talent cultivation lack flexibility, personalization, and differentiation. Some universities lack sufficient teaching staff and teachers with profound theoretical knowledge and practical experience in characteristic fields. Some universities lack teaching resources, have low quality characteristic textbooks, and insufficient investment in experimental equipment and practical bases.

### 3. SUGGESTIONS FOR FINANCIAL TALENT CULTIVATING

To cultivate compound, applied, and distinctive financial talents in the new era, universities need to update their financial talent cultivating concepts, reform their financial talent cultivating models, and innovate their financial talent cultivating mechanisms. The construction of characteristic finance courses is a good starting point, and it is a feasible reform path of gradually innovating the cultivating mode and mechanism of financial talents in the construction of characteristic finance courses.

The first is to fully recognize the importance of constructing characteristic finance courses. Courses are the core of talent cultivation and the main carrier for moral character shaping, knowledge imparting, and skill development. Courses are the foundation of education and teaching, and the main carrier for carrying out specific educational activities and achieving educational and teaching goals. To cultivate compound, applied, and distinctive financial talents, it is necessary to build a batch of characteristic financial courses.

The second is to clarify the direction and goals of the construction of characteristic finance courses. To strengthen the construction of characteristic courses, it is necessary to combine the university's educational characteristics, local economic and social development demands, and the development trend of the financial industry, clarify the positioning of characteristic financial talent cultivating, and then establish the direction and goals of characteristic financial courses construction. The cultivation of characteristic financial talents and the construction of characteristic courses should mainly focus on finance majors, but should not be limited to finance majors. Starting from the overall layout of disciplines and majors in the university, focusing on the talent demands of emerging fields such as technology finance, pension finance, and green finance, the "finance+" strategy should be implemented to enhance the characteristics of talent cultivation in related majors. It is essential to determine the position and role of characteristic finance courses within the entire curriculum system, and to reflect the uniqueness and value of these courses. It is imperative to refine the teaching objectives, content, and methods of the characteristic finance courses to ensure that their construction direction aligns with talent cultivation and course positioning.

The third is to strengthen the construction of characteristic financial textbooks and teaching materials. It is crucial to select or write textbooks that meet the teaching needs of the course, and to write a teaching outline that is consistent with the course objectives, as well as to continuously improve teaching materials based on the teaching outline. It is necessary to form a teaching content system that systematically reflects the cutting-edge knowledge and latest research results of disciplines, integrates the characteristics of schools and local cultural elements, and has distinct characteristics, a reasonable structure, strict and coherent logic, and accurate and standardized language. It is important to enrich the presentation forms of teaching content, fully utilize modern technological means, develop multimedia teaching materials and online teaching materials, enhance the fun and interactivity of teaching content, and stimulate students' learning interest and enthusiasm. It is also essential to strengthen the construction of problem sets and case sets, increase the design of interactive activities such as online discussions, and cultivate students' self-learning and innovation abilities.

The fourth is to improve the evaluation mechanism for characteristic financial courses. Course evaluation is an important guarantee for teaching effectiveness and educational quality. The characteristic finance courses have comprehensively innovated in teaching teams, teaching content, teaching methods, etc., and timely evaluation of the construction effect is particularly important. It is imperative to implement the student-centered evaluation concept and to evaluate the course construction according to the learning effect of students. On the basis of student and teacher evaluations, industry experts, employers and other industry representatives are introduced to enhance the comprehensiveness and objectivity of evaluations. Scientific evaluation indicators should be designed based on the needs of cultivating distinctive financial talents to systematically evaluate the teaching content, teaching resources, teaching methods, and teaching effectiveness of characteristic financial courses. Information technology should be utilized to conduct in-depth analysis of student learning behavior through big data, which allows for the scientific evaluation of the educational effects of various types of assessment methods such as case analysis, group discussions, and practical operations.

The fifth is to solidify the foundation of the construction of characteristic financial courses. The teaching staff for characteristic finance courses

should be strengthened, with an active introduction of teachers who possess relevant curriculum backgrounds and expertise as required by the teaching needs. The management system of characteristic finance courses should be improved, with the establishment of characteristic finance course construction projects and the formation of interdisciplinary, cross-college, and cross-university teaching teams for characteristic finance courses. The promotion and publicity of characteristic finance courses should be enhanced to increase their visibility and influence, encouraging a greater number of students to actively engage in the cultivation offered by these courses.

#### 4. CONCLUSION

Technological innovation, social development, and new changes in the financial industry have put forward new requirements for the cultivation of financial talents in universities. Cultivating compound, applied, and distinctive new era financial talents is an important task for financial majors in universities. Universities should take the construction of characteristic courses as the starting point, promote interdisciplinary development to cultivate the complexity of financial talents, strengthen the combination of industry, academia, and research to cultivate the applicability of financial talents, and leverage local characteristics and traditional advantages of universities to showcase the distinctive characteristics of financial talents.

#### REFERENCES

- [1] Hu Rui, Chen Xinzhong, Xue Shan. Strategies for Promoting Interdisciplinary Integration in Higher Education Institutions: A Case Study of Massachusetts Institute of Technology [J]. Journal of Huazhong Agricultural University (Social Sciences Edition), 2012 (03): 105-110. DOI: 10.13300/j.cnki.hnwkxb.2012-03.021
- [2] Zheng Jun, Sun Minghao Reflection and Reconstruction of the Construction of Finance Majors under the Background of the "New Economic Management" Strategy [J]. Journal of Hebei University of Science and Technology (Social Science Edition), 2019,19 (04): 88-93. DOI: 10.3969/j.issn.1671-1653.2019.04.013
- [3] Ge Heping, Lu Minfeng. Research on the Construction Path of Financial Discipline with Financial Technology as the Core in Higher Education Institutions [J]. Financial Theory and Practice, 2021 (06): 46-54 <https://kns.cnki.net/kcms2/article/abstract?v=9hl5eXOdJcZ558kLtTwMH5fvnz-DIAuBn8R6CVsbqN0IRpRj5KY4Q9VtivZAFUrTfjDa1aVfKd5ON22Ef8pZgEAJHYsGK49vS-RXAF4wmdBnsQDU728ZG3DZicgDiYKYaz3PNCyruTQm81YCZEe5QA=&uniplatform=NZKPT&language=CHS>
- [4] Zhou Fangzhao, Fu Hui, He Zhifang, et al. Challenges and optimization of talent cultivation models in finance under the background of financial technology [J]. Financial Theory and Teaching, 2021 (01): 94-98. DOI: 10.13298/j.cnki.ftat.2021.01.020
- [5] Fu Bing Exploration and Practice of the Integration and Development of "Computer Science and Technology+Finance" Major [J]. Journal of Higher Education, 2022, 8 (26): 72-75. DOI: 10.19980/j.CN23-1593/G4.2022.26.019
- [6] Li Zhe, Yi Zhigao, Cheng Chunlin. Exploration of the Optimization and Development Path of Undergraduate Finance Curriculum Construction in the Context of New Liberal Arts [J]. Teaching in Chinese Universities, 2023 (10): 63-68 [https://kns.cnki.net/kcms2/article/abstract?v=9hl5eXOdJcY1yXBcuc4sXUD1PUkRTxGzSbKORVYljfNjmxIMSLMKNsQj7kIFL2evgBI-NgHKFi5BTntkzSrV-S-BjJkwaPRabep6T3Mr\\_K9o-KNx8lmaOc2RempX2AdcXuqmPLvwMW80vqdA7GoiQ=&uniplatform=NZKPT&language=CHS](https://kns.cnki.net/kcms2/article/abstract?v=9hl5eXOdJcY1yXBcuc4sXUD1PUkRTxGzSbKORVYljfNjmxIMSLMKNsQj7kIFL2evgBI-NgHKFi5BTntkzSrV-S-BjJkwaPRabep6T3Mr_K9o-KNx8lmaOc2RempX2AdcXuqmPLvwMW80vqdA7GoiQ=&uniplatform=NZKPT&language=CHS)
- [7] Ye Nan. Practice and Inspiration of Cultivating Green Finance Talents in Foreign Universities [J]. Journal of Hubei University of Economics (Humanities and Social Sciences Edition), 2023,20 (08): 141-143 [https://kns.cnki.net/kcms2/article/abstract?v=9hl5eXOdJcaAaYpflbPReIRIm23ILR1v32MA3qNDf9ylxxyHlLehWO3Rd8UliJh11WCSOkMDFHrkGiWzaNi5mDIP\\_94-5gZGk5xMHOXFqYFS2z69yZfvVsAusG6A8bYMk87DQd\\_IcCMFr15iJU8w=&uniplatform=NZKPT&language=CHS](https://kns.cnki.net/kcms2/article/abstract?v=9hl5eXOdJcaAaYpflbPReIRIm23ILR1v32MA3qNDf9ylxxyHlLehWO3Rd8UliJh11WCSOkMDFHrkGiWzaNi5mDIP_94-5gZGk5xMHOXFqYFS2z69yZfvVsAusG6A8bYMk87DQd_IcCMFr15iJU8w=&uniplatform=NZKPT&language=CHS)

- [8] Gao Zhongpo, Zhang Xinjian, Yu Tianqi. Construction of Core Literacy System for Financial Talents under the Background of Financial Technology [J]. China Management Informatization, 2023,26 (05): 224-227 [https://kns.cnki.net/kcms2/article/abstract?v=9hl5eXOdJcYolf2E9s7WjqUfPG8kby-0X4wgCm7zgr5jG4pJSERKVvhJriN\\_5p-RILpzFqY4gbZvig1q3LrcRaF4l0LVqk0MeIEZDtVZp4Bknq9HdydgP49p57biesSzZvWqbSAyDG0XaA5GGtVN3A=&uniplatform=NZKPT&language=CHS](https://kns.cnki.net/kcms2/article/abstract?v=9hl5eXOdJcYolf2E9s7WjqUfPG8kby-0X4wgCm7zgr5jG4pJSERKVvhJriN_5p-RILpzFqY4gbZvig1q3LrcRaF4l0LVqk0MeIEZDtVZp4Bknq9HdydgP49p57biesSzZvWqbSAyDG0XaA5GGtVN3A=&uniplatform=NZKPT&language=CHS)
- [9] Wang Zhenzhen, Liu Jiaxun Exploring the Practice of Cultivating Applied Economy and Financial Talents from the Perspective of "Blockchain+Finance" [J]. Education Observation, 2023,12 (16): 117-120. DOI: 10.16070/j.cnki.cn45-1388/g4s.2023.16.020
- [10] Pu Zhenhuan. Exploration of the Cultivating Path for Undergraduate Logistics Finance Talents [J]. Logistics Engineering and Management, 2023,45 (05): 198-200 [https://kns.cnki.net/kcms2/article/abstract?v=9hl5eXOdJca-Dwv2MzF\\_WkWaDZlbOMEVM0GWjPDbxTQUK5pb0Mb8o7hMoigLtLv4OmzJ3CAjSh9yrY-9imjuzJZ5lZZGddO-eS2nTijRA0DrZY\\_IRwmEHwxUATPRI0S7BTDaLVGX5frh341fLkQ=&uniplatform=NZKPT&language=CHS](https://kns.cnki.net/kcms2/article/abstract?v=9hl5eXOdJca-Dwv2MzF_WkWaDZlbOMEVM0GWjPDbxTQUK5pb0Mb8o7hMoigLtLv4OmzJ3CAjSh9yrY-9imjuzJZ5lZZGddO-eS2nTijRA0DrZY_IRwmEHwxUATPRI0S7BTDaLVGX5frh341fLkQ=&uniplatform=NZKPT&language=CHS)