

# Analysis of the Implementation Path of Curriculum Reform for Finance Majors in the Context of Educational Digitization

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**Abstract:** At the beginning of 2022, the National Education Work Conference distinctly put forward the grand blueprint of "implementing the strategic action of education digitization". Based on the background of education digitization, the article takes the construction of financial professional curriculum reform as an example, analyzes the pain points of the current financial professional curriculum reform, and discusses the precise and strengthened supply of curriculum reform content. The article analyzes the pain points of the current financial professional curriculum reform, discusses the five aspects of curriculum reform construction path, such as precisely strengthening the content supply of curriculum reform, making full use of the "Internet+" digital resources support, meta-universe to help diversified experience of curriculum reform, optimizing the conceptual leadership of professional teachers in curriculum reform, and establishing a comprehensive evaluation system of curriculum reform. By digging deep into the connotation of curriculum reform of finance majors and refining the value paradigms of national self-confidence, social responsibility, and professional ethics embedded in the teaching of professional curriculum, students are trained to become comprehensive financial talents with national sentiment, global vision, and professional literacy.

**Keywords:** Digitalization of Education; Financial Majors; Curriculum Reform

## 1. Introduction

At the beginning of 2022, the National Education Work Conference distinctly put forward the grand blueprint of "implementing the strategic action of education digitization", and subsequently, the State re-emphasized the

strategic direction of "promoting education digitization", which signifies that China's education system is accelerating towards a new stage of comprehensive digital transformation [1]. This signifies that China's education system is accelerating towards a new stage of comprehensive digital transformation. This transformation not only represents a technological innovation, but also a comprehensive innovation of educational concepts, methods and means. Contemporary college students, who have long been immersed in the colorful information of online media, have an active way of thinking, guiding the value of learning and practice of professional courses, with a strong desire to learn and explore, and the formation of "three views" is more complex, and the reform of the financial professional curriculum is a long way to go.

The Ministry of Education in the "higher education curriculum reform and construction guidance program" clearly put forward to "comprehensively promote the construction of curriculum reform, combined with the characteristics of the professional classification to promote" [2]. The integration of reform concepts into the teaching of professional courses in colleges and universities and the extensive use of current financial cases and socio-economic hotspots are aimed at constructing an all-round education system that integrates value leadership, knowledge transfer and ability cultivation. Therefore, based on the background of education digitalization, it is of great significance to study the path of reform and construction of financial professional courses.

## 2. The Role of Financial Professional Curriculum Reform in the Context of Education Digitalization

### 2.1 Reshaping the Value System, School-Enterprise Collaborative Education

The construction of curriculum reform should be closely integrated with the study of professional knowledge, and the study of professional knowledge in colleges and universities should pay attention to the teaching of the connotation of reform, improve the quality of students' thinking, and cultivate a good quality of professional ethics. Colleges and universities should be combined with professional characteristics to contact enterprises to set up course standards, syllabus, arrangement of in-class practice content, etc., to avoid "copying" [3].

## **2.2 Promote Digital Teaching, Deepen the Evaluation Mechanism**

Under the background of education digitization, colleges and universities actively innovate teaching equipment and teaching methods, adopt new media, meta-universe, big data and other advanced technical means to improve the traditional didactic, one-way indoctrination teaching methods, effectively improve the interest and novelty of teaching in the practical aspects of the professional courses, and fully mobilize the autonomy of the students' learning. At the same time, the use of subjective pluralism, the form of reasonable assessment and evaluation system to realize the "teachers and students" double-body reform effect of effective evaluation.

## **2.3 Breaking the Traditional Teaching System and Creating a Diversified Model**

Adopting new media, meta-universe, big data, artificial intelligence, virtual reality (VR) and other advanced technical means to innovate the traditional teaching methods, in the context of education digitalization, integrate the reform elements into the construction of professional courses, and realize the digital transformation of interdisciplinary and interdisciplinary.

## **2.4 Optimize In-Class Practical Teaching and Improve the Quality of Talents**

The professional construction of local colleges and universities should be adapted to the development of the local economy, and pay attention to the construction of curriculum reform in the practical aspects of the professional curriculum, which helps to deliver high-quality financial talents to local enterprises. According to the employment direction data of our financial students in

previous years, more than 50% of the students are engaged in banking, securities, funds, insurance and other financial industries, good professional ability, correct "three views" training and excellent professionalism are indispensable.

## **3. The Pain Points of Financial Professional Curriculum Reform in the Context of Education Digitalization**

### **3.1 Insufficient Skills in Introducing Reform Elements and a Single form of Presentation**

First, the introduction of reform elements in curriculum teaching is too rigid, and the relevance of the theoretical knowledge of the discipline is not strong, especially in the practical aspects of the financial professional program, the integration of reform connotation seems to be abrupt and unnatural. Secondly, there is a lack of relevance in the application of network resources. Network resources in a variety of shapes and colors, a wide range of content, cited properly to effectively mobilize the classroom teaching atmosphere and students' enthusiasm for learning, but blindly introduced to reduce the depth of the students' learning, affecting the students' logical thinking ability to exercise the effect. Thirdly, the teaching effect in the course reform is not good. Some teachers of finance majors are too concerned about the communication and implementation of positive elements in the teaching process of curriculum reform, while neglecting the abandonment of negative elements, which affects the teaching effect of the curriculum. Fourth, the curriculum reform presents a single form. Professional teachers' teaching of the course mostly adopts the traditional method of one-way text instillation, without effectively combining the contemporary advanced digital technology to provide support for it.

### **3.2 Insufficient Cognition and Ability of Professional Teachers in Curriculum Reform**

Professional teachers in colleges and universities have unquestionable professional knowledge and professional ethics, but the cognition and ability to reform in the process of teaching and solving problems are shallow, lack of systematic systematic learning of theoretical knowledge of reform, and lack of

sensitivity to the reform elements embedded in professional knowledge. In addition, college teachers face the pressure of title and scientific research, and have little enthusiasm for curriculum reform.

### **3.3 Incomplete Reform Evaluation System of the Practical Part of the Curriculum**

The current evaluation of the effectiveness of the curriculum reform in the practical aspects of the financial professional courses is limited to one-way - the teacher's evaluation of the students, and does not involve the students' evaluation of the teacher's teaching methods and teaching content. At the same time, the assessment technology is single, mostly limited to basic attendance tools and evaluation tools, and the assessment content is not comprehensive.

## **4. The Implementation Path of Financial Professional Curriculum Reform in the Context of Digitalization of Education**

### **4.1 Precise Reinforcement of Practical Aspects of the Curriculum Reform Content Supply**

First, the reform elements are introduced flexibly and appropriately. The mining and effective combination of the elements of the reform of the practical aspects of the financial professional course is the current difficulty, and the specific operation should be flexible and appropriate to avoid rigidity. For example, in the practical aspects of the finance course, the digital RMB has become the mainstream of China's transactions, and the rise of this for the liquidity and stability of the entire financial market has caused a certain degree of impact, guiding students to think: compared with other countries, China's regulatory policy and technological innovation level, what is the superiority? In order to stimulate students to develop the country of science and technology, science and technology to serve the country's concept of struggle. For example, the practical aspects of the macroeconomics course, you can use the teacher to introduce, guide the students to discuss with each other and group communication, from the problem-oriented, combined with a variety of methods, such as seminar teaching and case study teaching, the macroeconomic theory of learning to live and reasoning through, and fully mobilize the

students' subjective initiative, strengthen their team spirit and organizational and coordinating skills. For example, in the teaching of the stock simulation trading course, when telling the chapters of various stock trading strategies, students are organized to download the stock operating software Flush, Securities Pass, Snowball, etc., open an account, give the virtual investment amount and a certain investment period, and then let the students select stocks, buy and sell stocks in the simulation disk using the learned strategy theories, and then analyze the investment concept and performance with an investment report at the end in order to cultivate the students' awareness of risk and enhance their problem-processing ability. This is to cultivate students' risk awareness and improve their problem handling ability. Secondly, it is to enhance the pertinence of the utilization of digital resources in the practice session. The construction of professional courses should maximize students' initiative and autonomy in the practice session of the course. Teachers should select high-quality network resources in a targeted manner, such as financial case library, financial classroom, financial information and other multi-angle, multi-channel to provide students with "knowledge nutrition". Third, effectively improve the reform of the teaching effect. Professional teachers in the reform of teaching should adhere to the "student-oriented", accurately identify the students' inner needs and confusion, in the practical aspects of the reform elements of effective convergence, to present students with more in line with their psychological characteristics and cognitive level of the teaching content.

### **4.2 Make Full Use of "Internet+" Digital Resource Support**

Under the background of education digitization, digital resources are an important means of curriculum reform for financial majors. First, the multi-departmental platform for the collection of reform elements of the practical aspects of the finance professional curriculum is jointly built. The practical aspects of the financial professional course mostly use group reporting to analyze hot economic issues in society, debate on the positive and negative viewpoints of social and financial hotspots, and hands-on simulation, etc., to introduce

cases of hot economic issues, and guide students to deepen their professional theories, improve their comprehensive quality, and internalize the elements of reform through case analysis. Therefore, multi-departments such as the Ministry of Education, schools, professional teachers and financial enterprises are encouraged to cooperate to jointly build a platform for collecting reform elements in the practical aspects of the financial professional curriculum to enrich the case base of the professional curriculum [4]. Second, to build a digital resource base for the practical aspects of the financial professional curriculum civics. Successfully build a digital resource library with professional characteristics, and incorporate economic typical cases, knowledge maps, thematic learning, important news and information and other kinds of materials by side. The use of advanced digital technology to deepen the teaching mode, enrich the curriculum reform teaching interesting, for professional courses in the practical aspects of the reform of the construction of a wealth of available resources. Thirdly, professional and technical training is carried out to improve the technical application ability of teachers of finance majors. On the one hand, technical experts are invited to provide training and operational guidance; On the other hand, it can also provide cross-departmental technical assistance to help teachers better apply digital technology in teaching Civics and Politics, so that "curriculum reform" and "professional teaching" can be mutually promoted.

#### **4.3 Meta-Universe Helps Diversified Experiences of Practical Course Reforms**

The application of meta-universe technology in the teaching of practical reform can effectively increase the visualization, interest and interactivity of teaching. First of all, teachers can skillfully use multimedia and virtual extension technology in the course reform teaching, so that the important and difficult points in the teaching content can be visualized, which can help students understand and grasp the core points of theoretical knowledge more quickly. Secondly, combining AR (augmented reality), VR (virtual reality), MR (mixed reality) and XR (extended reality) and other cutting-edge technological means, teachers can seamlessly connect classroom theoretical teaching with practical activities, and through

the interactive way, students can more deeply understand and apply the theoretical knowledge that is originally more rigid, and at the same time, it also adds more fun and attraction to the classroom. Finally, through the introduction of meta-universe technology, the teaching of the practical aspects of professional courses can present a new look. From the introduction of the case, to the group discussion of the students, to the presentation of the results, the whole process can be shown in an all-round way. This is not only conducive to the transmission of knowledge, but also promotes students to think deeply, comprehend what they have learned, and effectively internalize the knowledge into their own abilities, realizing the perfect combination of knowledge transfer, student understanding and application.

#### **4.4 Optimize the Conceptual Leadership of Curriculum Reform for Professional Teachers**

First of all, schools should actively plan and invite experts and scholars in the industry and build a platform for them to organize academic lectures and professional training activities. These activities are aimed at deepening teachers' reform concepts, especially in the teaching of professional courses, how to integrate reform elements more effectively. Through innovative methods such as "thought provoking", we can jointly explore and refine the teaching techniques of curriculum reform, so as to comprehensively enhance the ability of professional teachers in reforming teaching. Secondly, we need to comprehensively promote the improvement of teachers' technology application ability, covering all age groups. Backbone teachers are encouraged to play a leading role in taking the initiative to develop and utilize digital teaching resources, which will not only enhance their digital literacy, but also inject more vitality and innovation into teaching. Finally, in order to strengthen the integration of reform education and financial profession, we should actively form interdisciplinary curriculum reform construction teams. Promote the organic integration of reform education and professional teaching, realize the goal of collaborative education, jointly excavate teaching materials and develop teaching methods, and form an interdisciplinary and

inter-specialty curriculum reform teaching team.

#### **4.5 Establishing a Comprehensive Evaluation System for Curriculum Reform in the Practice Section**

Through the multi-dimensional and reasonable assessment system, students are urged and motivated to actively participate in the implementation of the curriculum reform in the practical part of the class. First of all, the establishment of "teachers and students" oriented evaluation. Teachers evaluate the design of practice content, self-evaluation, and sustainability of teaching development in order to motivate students to correct their learning motivation. At the same time, the effectiveness of talent cultivation is examined from the perspective of students. Secondly, the assessment method of itemized scoring and comprehensive evaluation is adopted, combining the teaching focus of professional classroom teaching and practice sessions, and focusing on the comprehensive evaluation of course assessment inside and outside the classroom. Guiding students to "virtual simulation+practical exercises+project demonstration" and other practical aspects of the assessment form focuses on professional quality and behavioral norms, and reasonably set the proportion of process assessment and results assessment, assessment and evaluation throughout the entire process. Finally, strengthen the application of big data. The application of artificial intelligence, big data and other optimization algorithms to form an automatic digital all-round process system, the system data automatically monitor and record the scores of students' practice sessions, automatically generate a comprehensive score, and achieve the unity of high efficiency and intelligence.

#### **5. Practice of Financial Professional Curriculum Reform and Construction in the Context of Education Digitalization**

In the wave of education digitalization, the reform and construction of the practical aspects of the financial professional courses need to be carried out through the three stages of pre-course preparation, in-class interaction and post-course consolidation, to ensure that the reform elements are naturally integrated into the whole teaching process. To this end,

we can optimize the teaching design and course assessment, and at the same time, with the help of digital tools such as online education platforms and virtual-reality combination classrooms, enrich the teaching forms, such as online knowledge competitions, virtual operation practice and other activities, in order to form a typical example of the reform and construction of the practical aspects of the course reform of the financial profession [5].

##### **5.1 Before Class: Optimizing the Teaching Design of the Practical Link of Financial Professional Courses**

In the practical link of finance professional course, the key to curriculum reform lies in optimizing the teaching design of the course [6]. In order to reconstruct the teaching objectives of the practical aspects of the financial courses, teachers should deeply explore the reform literacy objectives behind the chapters of the professional courses and the value orientation they convey, so as to ensure the deep integration of practical teaching and reform education. A large number of financial data, economic hotspots and real-life cases and other materials are introduced to analyze the connotation of the financial rule of law, morality, culture, etc., to trigger students' resonance and cultivate their financial sentiment. Through this teaching method, teachers can guide students to form a solid foundation of financial values, lay a solid professional quality for their future career in the financial field, and ensure that they have the correct moral concepts and professional conduct. For example, in the practical part of the financial marketing course, a case study on China's digital finance is set up, and students are organized to report in groups. Through data collection, students can understand the leading position of China's digital payment, so that they can feel a strong sense of national pride and a sense of mission to serve the country with science and technology. In the stock simulation trading course practice sessions, the organization of students to download the stock operating software, one person, one account, simulation of stock speculation, through the practice of manipulation simulation, understand that the stock has risk, investment needs to be cautious, any investment in financial instruments are risky and profitable



coexist, and cultivate students' awareness of the risk and dialectical unity of thinking.

### **5.2 In Class: Enriching the Presentation of the Practical Aspects of the Finance Program**

One is to utilize digital technology. Using virtual simulation, meta-universe and other teaching methods, the reform elements are presented in a more vivid and three-dimensional way through micro-video, 3D animation and other digital means to improve students' learning enthusiasm and participation. Secondly, combining financial cases. In the practical part of the financial market science course, it can be combined with actual cases, and the current hot visualization software can be used to simulate the risk contagion path and effect of the financial market to help students understand the importance of risk management in a more intuitive way. Third, interactive interpretation. In the practical sessions of the finance course, teachers and students can be used in an interactive way, through the virtual presentation of the collapse effect of the financial market, to guide students to think about and respond to risk management, and to cultivate their critical thinking and problem-solving ability. Fourth, storytelling presentation. Presenting financial knowledge in the form of storytelling, guiding students to understand the background, development and prospect of the financial industry by telling stories about financial history and characters, and cultivating their financial professional emotions and sense of social responsibility.

### **5.3 Post-course: "Competition for Learning + Integration of Classes and Certificates" to Enhance Quality**

In the post-course stage, the method of "promoting learning by competition + integration of course certificates" can be adopted to further improve the comprehensive quality of students. Responding to the spirit of innovation and entrepreneurship, we actively carry out the intelligent teaching mode of financial "competition for learning", and improve the teaching effect of curriculum reform through the "league" mode [7]. Encourage students to participate in a variety of digital finance competitions, such as "Internet +" Innovation and Entrepreneurship Competition, "Challenge Cup" Program

Competition, e-commerce "Three Creations" Challenge, College Business Elite Challenge, etc., to effectively cultivate students. Challenge Competition, etc., to effectively cultivate students' win-win cooperation and enterprising professional spirit, and improve their teamwork ability and application of financial professional knowledge. At the same time, students are encouraged to obtain various financial professional certificates, such as futures, securities, funds, banking, insurance qualification certificates, CFA, CPA, PRM, etc. Through abundant teaching resources such as classical case teaching and online question bank simulation, the program implements the "Competition for Learning + Integration of Classes and Certificates" from multiple perspectives, through multiple channels, and in an all-round way to cultivate practice-oriented talents and to cultivate practical talents.

### **5.4 Process: Improve the Assessment of the Practical Part of Financial Professional Courses**

In the practical link of finance professional courses, perfecting course assessment is an important support to improve the effect of course reform and construction. First of all, clear evaluation standards. Develop clear evaluation standards, including specific indicators and weights for process evaluation and outcome evaluation [8]. Process evaluation can pay attention to the degree of students' compliance with the code of conduct, the spirit of the practical classroom presentation, the completion rate of practical tasks, the classroom practice tasks reflective and other aspects, focusing on the cultivation of students' compliance with the law, patriotism and dedication, teamwork and active thinking and other qualities. Outcome-based evaluation can comprehensively assess the completion of the tasks of the course practice sessions, focusing on the performance of students' comprehensive ability. According to the characteristics and requirements of the practical aspects of different courses, the assessment methods can be flexibly selected to ensure the fairness and effectiveness of the assessment. Secondly, timely feedback and adjustment. In the assessment process, timely feedback is provided to students, pointing out the problems and deficiencies in their learning and practice, and giving suggestions for improvement. At

the same time, teachers can adjust teaching strategies and methods in time according to the assessment results in order to improve the effectiveness of teaching and the construction of curriculum reform. Finally, students are encouraged to self-assessment and mutual assessment. Encourage students to carry out self-assessment and mutual assessment, so that they can understand their performance and progress in the practical part of the course, and at the same time, it can also promote the communication and learning among classmates. Through the combination of omni-directional and multi-means, we can comprehensively and objectively assess the learning effect of students and the effect of course reform and construction.

## 6. Conclusion

Financial professional curriculum reform and innovation is currently an important part of the teaching reform of major universities, the article is based on the background of educational digitization, the study of the practice of financial professional curriculum reform and construction, can effectively improve the comprehensive quality of financial professionals and sense of social responsibility, and cultivate more composite financial professionals adapted to the changes and development of the industry.

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