

# *Research on the Reform of Financial Management Curriculum Based on the Concept of Innovation and Entrepreneurship Education*

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**Abstract:** In light of the growing emphasis on innovation and entrepreneurship education, there is an urgent need to reform financial management courses. This study underscores the importance of infusing these courses with principles of innovation and entrepreneurship education. Such integration is crucial for meeting the evolving demands of socio-economic development, enhancing students' comprehensive skills and employability, fostering academic growth, and aligning with contemporary educational reforms. The proposed reform encompasses updating teaching objectives, refining course content, introducing innovative teaching methodologies, and enhancing evaluation techniques. Practical avenues for this reform include bolstering teacher training, integrating educational resources, establishing hands-on teaching centers, and cultivating an environment that encourages innovation and entrepreneurship. By implementing these changes, the goal is to produce top-tier financial management professionals equipped with innovative and entrepreneurial capabilities, thereby addressing societal needs and advancing the field of financial management in the age of innovation and entrepreneurship.

## **1 Theoretical Foundation**

### **1.1 Theory of Innovation and Entrepreneurship Education**

Innovation and entrepreneurship education is a pedagogical model designed to foster students' innovative spirit and entrepreneurial capabilities. This approach accentuates the importance of

students utilizing innovative thought to address challenges, while simultaneously mastering professional knowledge and transforming concepts into tangible business endeavors. Central to the theory of innovation and entrepreneurship education is the emphasis on nurturing students' innovative consciousness, entrepreneurial drive, and the practical aptitude to navigate a rapidly evolving economic and social landscape.

### 1.2 Objectives and Requirements of the Financial Management Program

Financial management, a highly practical discipline, emphasizes the time value of money and risk-reward as its core principles. It delves into financial management from four key aspects: fund-raising, investment, operations, and profit distribution. The objective of its instruction is not solely to impart pertinent financial knowledge and skills, but also to foster students' financial decision-making and risk management capabilities. Within the framework of innovation and entrepreneurship education, it is imperative for the financial management curriculum to further bolster students' innovative thought processes and entrepreneurial practice skills. This will equip them to effectively execute financial planning and management, thereby supporting the innovation and growth of enterprises in their future professional endeavors.

### 1.3 Theoretical framework for curriculum reform

The theoretical framework for the reform of financial management curricula comprises four key elements: student-centeredness, competency-basedness, integrated learning, and feedback and assessment. The student-centered approach places students at the heart of the learning process, emphasizing active participation, individual differences, and fostering interest and potential through interactive sessions. The competency-based approach is designed to cultivate practical skills, developing course content around core competencies and enhancing comprehensive abilities through practical teaching methods. Integrated learning underscores the importance of combining theory with practice, encouraging students to understand and address problems through case studies and simulation exercises. Finally, feedback and assessment necessitate the creation of a consistent mechanism to evaluate learning outcomes in a variety of ways. This allows educators to modify teaching content and methodologies to enhance the overall quality of education. The specific theoretical framework is depicted in Figure 1.

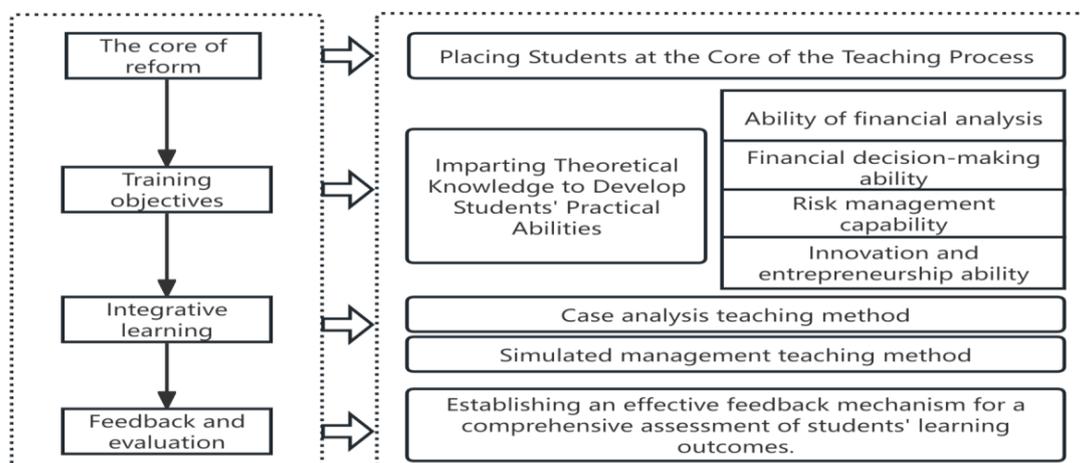


Figure 1 Theoretical framework of curriculum reform

## 1.4 Current status of research on innovation and entrepreneurship education at home and abroad

Jeffery Timmons (2001)<sup>[1]</sup> is credited with pioneering the field of entrepreneurship, establishing a foundational framework for theoretical research on innovative entrepreneurship education. Subsequent scholars, including Voyatzaki (2003)<sup>[2]</sup>, Plaschka and Welsch (1990)<sup>[3]</sup>, Bechard (1998)<sup>[4]</sup>, and Jack and Colin (2004)<sup>[5]</sup>, have conducted comprehensive studies on the nuances of innovation and entrepreneurship education. Their insights delve into the essence, objectives, and core components of this education, highlighting its potential to nurture students' innovative and entrepreneurial acumen, and equip them with the skills to discern opportunities, amalgamate resources, and generate value in dynamic market contexts. Other notable contributors such as Kolin Ball (2005)<sup>[6]</sup>, Berbegal - Mirabent (2005)<sup>[7]</sup>, and Edward de Bono (2010)<sup>[8]</sup> have underscored the significance of this education, emphasizing that successful entrepreneurs need to possess agile organizational planning, management, and coordination competencies. The cultivation of these skills through innovation and entrepreneurship education is pivotal not only for individual career advancement but also for broader socio-economic progress.

Domestic research on the implications of innovation and entrepreneurship education can be traced back to Tao Xingzhi's "Declaration on Creation Education" from 1933, who is considered the pioneer of creation education in China. However, substantial research in this field has only recently gained momentum following the state's increased focus on innovation and entrepreneurship education. Noteworthy scholars in this arena include Zhang Bing and Bai Hua (2014)<sup>[9]</sup>, Zhou Bing (2014)<sup>[10]</sup>, and Gao Xiaojie (2007)<sup>[11]</sup>, who have further defined the concept of innovation and entrepreneurship education, building on international research findings and taking into account China's unique national conditions. They underscore that the ultimate goal of innovation and entrepreneurship education is to enhance students' comprehensive abilities and employability, foster the development of innovative talents, and stimulate socio-economic growth. There is also growing interest in the development of the curriculum system for innovation and entrepreneurship education at higher educational institutions. Jia Xinmin (2010)<sup>[12]</sup> posits that the curriculum system for innovation and entrepreneurship should align with the existing domestic talent development model, allowing for continual refinements and enhancements of teaching methods and curricula. Other prominent scholars contributing to this discussion include Su Xiaodong (2013)<sup>[13]</sup>, Zhang Hong (2022)<sup>[14]</sup>, Kong Yan (2022)<sup>[15]</sup>, Xu Hong (2023)<sup>[16]</sup>, and Zhang Qingqing (2024)<sup>[17]</sup>, who have explored the guiding principles, content structure, and execution strategies of the innovation and entrepreneurship curriculum system from various viewpoints.

Existing domestic and international studies have yielded significant findings in the field of innovation and entrepreneurship education, providing a valuable foundation for this study. In recent years, the proliferation of innovation and entrepreneurship education in higher education institutions has seen initial successes. However, the challenge remains: how to profoundly integrate the principles of innovation and entrepreneurship into professional curricula. Currently, the incorporation of these concepts into financial management courses is not widely practiced. Given that these courses are often regarded as premier offerings within academic institutions, there is a pressing need to explore reforms in financial management education through the lens of innovation and entrepreneurship.

## **2 The Necessity of Innovative and Entrepreneurial Education Concepts for the Reform of Financial Management Courses**

### **2.1 Adapting to socio-economic development needs**

In light of the accelerating global economy and escalating market competition, innovation and entrepreneurship have emerged as pivotal engines for economic growth and societal advancement. Traditional financial management professionals have predominantly centered on foundational tasks such as financial accounting and oversight. However, contemporary enterprises require financial management experts equipped with innovative and entrepreneurial competencies. These individuals are tasked with offering sophisticated financial analyses and decision-making guidance for enterprise innovation initiatives in a dynamic and unpredictable market landscape. Furthermore, they play a vital role in ensuring efficient mobilization and allocation of funds, proficiently managing financial risks, and facilitating the sustainable growth of enterprises.

### **2.2 Enhance students' comprehensive quality and competitiveness in employment**

The concept of innovation and entrepreneurship education emphasizes nurturing students' innovative consciousness, thought processes, and entrepreneurial capabilities. When incorporated into financial management courses, this approach can expand students' perspectives, stimulating their interest in learning and creativity. Participation in innovation and entrepreneurship practice activities enables students to integrate their financial management knowledge with real-world applications, thereby enhancing their problem-solving skills. Furthermore, students who possess innovation and entrepreneurship skills often have a competitive edge in the job market. They are not only equipped to meet the demands for financial management expertise in traditional businesses but are also well-suited to address the evolving needs of emerging entrepreneurial enterprises, thereby opening up broader career prospects.

### **2.3 Advancing the discipline of financial management**

The incorporation of innovation and entrepreneurship education into financial management has infused the discipline with renewed vigor and expanded opportunities for development. Traditionally, the field of financial management has predominantly centered on the internal financial operations of enterprises, limiting its research scope. In contrast, the paradigm of innovation and entrepreneurship education emphasizes interdisciplinary collaboration and holistic application of knowledge. This approach has enriched financial management by fostering cross-pollination with disciplines such as economics, management, and law, thereby diversifying its research domains and methodologies. For instance, within innovation and entrepreneurship initiatives, financial management collaborates closely with fields like marketing and human resource management to ensure project success. Such interdisciplinary synergy not only addresses real-world challenges but also nurtures the progressive evolution of financial management theory.

## **3 Basic Ideas of Financial Management Curriculum Reform by the Concept of Innovative and Entrepreneurial Education**

### **3.1 Renewal of the teaching objectives of the curriculum**

Building upon the traditional objectives of financial management courses, which primarily emphasize knowledge dissemination and skill development, there is a need to explicitly integrate

the goal of fostering students' innovative capabilities. Specifically, students should be equipped to creatively utilize financial management principles to address intricate financial challenges faced by businesses during their innovation and entrepreneurial endeavors. This could involve developing distinctive financing approaches to support the capital requirements of innovative projects or introducing pioneering cost control strategies to enhance the competitive edge of innovative enterprises.

### **3.2 Optimization of course content**

Incorporate select, representative cases of innovative and entrepreneurial enterprises into the curriculum of financial management courses. These cases should span a diverse range of industries and developmental stages, including emerging technology startups and traditional enterprises undergoing innovation and transformation. Through detailed analysis of these cases, students can gain insights into the unique challenges and opportunities that such enterprises encounter in financial management. Furthermore, they can learn how to effectively apply financial management theories and methods to address real-world issues.

### **3.3 Innovative methods of teaching and learning in the curriculum**

Student-driven innovation and entrepreneurship projects facilitate practical, hands-on experience through group activities. Teachers can provide students with real or simulated project background information, challenging them to utilize their financial management knowledge to complete financial analysis, budgeting, and other tasks. The use of a virtual business environment platform enables students to assume various financial roles, participating in a broad range of financial activities from the establishment to the operation of an enterprise. This immersive approach allows for a more intuitive understanding of the financial operations of an entrepreneurial enterprise, thereby enhancing their practical operational skills and their ability to navigate complex financial challenges.

### **3.4 Improvement of course assessment methods**

It is proposed to transition away from the traditional single-assessment method, which predominantly relies on examination results, towards a diversified assessment system. This new system would include an evaluation of students' theoretical knowledge as well as their practical innovation and entrepreneurship skills. For instance, assessments could be based on performance in project-driven teaching and simulated entrepreneurship scenarios, with criteria such as teamwork and problem-solving abilities taken into account. Additionally, students could be assessed on their ability to analyze innovative and entrepreneurial cases by writing detailed case analysis reports that outline financial management issues and proposed solutions. Furthermore, the development of innovative thinking could be evaluated by presenting open-ended questions that encourage students to propose innovative financial management ideas or programs. Importantly, this assessment system would focus on students' performance throughout the entire learning process, enabling the timely detection and rectification of issues to enhance learning outcomes and further develop their innovation and entrepreneurship capabilities.

## **4 The Practical Path of Financial Management Curriculum Reform by the Concept of Innovative Entrepreneurship Education**

### **4.1 Strengthening the faculty**

#### **4.1.1 Enhancing Faculty Innovation and Entrepreneurship Literacy**

Teachers are encouraged to engage in innovation and entrepreneurship training courses, academic seminars, and practical activities within enterprises. This allows teachers to gain a nuanced understanding of the practical operations of innovation and entrepreneurship and to acquire relevant, cutting-edge knowledge and hands-on experience. For instance, teachers are often required to participate in specialized training led by professional organizations focused on knowledge and skills such as entrepreneurial project incubation, innovative financing models, and enterprise risk management. By integrating their newfound knowledge into their teaching of financial management courses, educators can provide their students with more practical and forward-thinking educational content.

#### **4.1.2 Bringing in faculty with experience in innovation and entrepreneurship**

Colleges and universities must proactively recruit educators with backgrounds in innovation and entrepreneurship to augment their financial management course faculties. These educators, sourced from the corporate sector, possess extensive financial management expertise garnered during their entrepreneurial endeavors. For instance, a successful founder of a science and technology enterprise could serve as a part-time instructor, offering insights into practical financial planning, fundraising, and risk management encountered in the startup phase. Such real-world examples and hands-on experiences can significantly boost student engagement and passion for innovation and entrepreneurship.

### **4.2 Integration of teaching resources**

#### **4.2.1 Development of Innovation and Entrepreneurship Teaching and Supporting Materials**

Teachers should be tasked with the creation of financial management teaching materials that align with the principles of innovation and entrepreneurship education. The content of these textbooks ought to feature case studies illustrating innovation and entrepreneurship, while also integrating pertinent knowledge modules such as financial planning for entrepreneurial ventures and fundraising strategies for innovative projects. In tandem with this, there should be an emphasis on developing case studies, problem sets, teaching courseware, and other supplementary materials. These educational resources should prioritize practicality and inspiration, aiming to encourage students to apply their financial management skills to real-world innovative entrepreneurial scenarios. For instance, a casebook could be compiled specifically focusing on the financial management of innovation and entrepreneurship. This would include a diverse collection of cases from enterprises at various stages of development across different industries. Each case should be thoroughly analyzed, highlighting the financial challenges encountered and the corresponding solutions, thereby providing students with a wealth of learning resources.

#### **4.2.2 Expanding teaching space by utilizing online teaching platforms**

To optimize the use of network teaching platforms such as MOOC and Wisdom Tree, it is

beneficial to upload course teaching videos, courseware, and case studies. This enables students to access these resources and conduct independent learning according to their own progress and needs, anytime and anywhere. Additionally, these platforms can provide functional modules such as online discussion forums, homework submission areas, and test areas to encourage interactive communication between teachers and students, as well as facilitate teaching management. For instance, teachers can assign innovation and entrepreneurship project tasks through the online platform. After completing the projects in groups, students can submit their results to the platform, enabling teachers to provide online reviews and guidance.

### **4.3 Establishment of practical teaching bases**

#### **4.3.1 Establishment of internship bases in cooperation with enterprises**

It is imperative for colleges and universities to collaborate actively with businesses to establish financial management internship bases, thereby providing students with practical opportunities. These collaborations should extend to both innovative entrepreneurial ventures and conventional businesses. Such internships allow students to engage in the financial management activities of the enterprise, familiarize themselves with the real-world financial operations, and apply their theoretical knowledge in a practical context. For instance, by partnering with a technology start-up, students can participate in the creation of the company's financial budget and the design of fundraising programs during their internship, thereby enhancing their financial management skills in a practical environment.

#### **4.3.2 Construction of on-campus innovation and entrepreneurship practice center**

Colleges and universities may establish innovation and entrepreneurship practice centers on campus to offer students a simulated entrepreneurial environment. These centers can be outfitted with simulated entrepreneurship software, virtual business platforms, and other necessary equipment. Here, students can engage in simulated entrepreneurial activities to gain firsthand experience in financial management of an entrepreneurial process. For instance, within the innovation and entrepreneurship practice center, students could utilize the simulation software to establish their own virtual enterprises, devise enterprise financial plans, and conduct activities like fund-raising and deployment. This would enhance their practical operation skills and their ability to navigate complex financial challenges through simulation and real-world entrepreneurship practice.

### **4.4 Creating a culture of innovation and entrepreneurship**

#### **4.4.1 Organize lectures and seminars on innovation and entrepreneurship**

Universities are mandated to regularly host lectures and seminars on innovation and entrepreneurship. These events feature esteemed business professionals, successful entrepreneurs, and distinguished academic scholars. The curriculum for these sessions may encompass topics such as innovation and entrepreneurship policies, the incubation process of entrepreneurial ventures, and pioneering approaches in financial management. Such initiatives offer students an avenue to engage with contemporary knowledge and real-world experiences, thereby kindling their enthusiasm for innovation and entrepreneurship. For instance, hosting a lecture by a renowned technology start-up entrepreneur can offer invaluable insights into their entrepreneurial journey and financial management expertise, serving as a rich learning resource for students.

#### 4.4.2 Organization of innovation and entrepreneurship competitions

Universities should initiate and actively promote innovation and entrepreneurship competitions, encouraging student participation. These competitions, such as entrepreneurial plan and financial analysis contests, effectively stimulate innovative thinking and foster a competitive spirit among students, thereby enhancing their innovation and entrepreneurship skills. For instance, the entrepreneurial plan competition requires students to work collaboratively in groups to formulate business models and financial plans. This process necessitates independent exploration and problem-solving, thereby bolstering their innovative and entrepreneurial capabilities.

#### 5 Conclusion

In the present age of rapid innovation and entrepreneurship, reforming the financial management course based on innovative and entrepreneurial education is crucial. Through an in-depth examination of such reform in this study, we have elucidated its direction and trajectory, whilst acknowledging the challenges and opportunities it presents. As educational concepts continually evolve alongside the advancements in educational technology, the financial management course will experience ongoing optimization and enhancement. In the future, the integration of innovative teaching methodologies and tools such as virtual reality and artificial intelligence, is anticipated to further enrich students' learning experiences and outcomes. Concurrently, with the escalating demand for innovative and entrepreneurial talents, the reform of the financial management course will delve deeper and become more comprehensive. This will foster a generation of high-calibre financial management innovators and entrepreneurs who can meet the demands of contemporary society, thereby contributing significantly to the progression of the socio-economic landscape.

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