Research on Teaching Method Reform of Finance Course in Local Undergraduate Universities Under the Background of Artificial Intelligence

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Abstract: *The rapid evolution of artificial intelligence (AI) has profoundly reshaped the operational logic and talent demands of the financial industry,placing new requirements on the Finance course offered by local undergraduate universities that aim to cultivate application-oriented talents.In response to existing problems such as disconnection between teaching content and cutting-edge industry developments,monotonous teaching methods, insufficient application of practical teaching and technical tools,single assessment modes,and inadequate digital literacy among teachers,this paper proposes to adopt outcome-based education as the guide and integrate technology empowerment,industry-university collaboration and moral education.At the classroom teaching level,the teacher-student learning relationship should be reshaped from three dimensions:strengthening teachers' guidance in classroom instruction, motivating students' learning enthusiasm,and giving full play to students' subjective learning initiative.At the systematic support level,collaborative progress should be achieved by reconstructing teaching content,building smart classrooms,advancing practical teaching, integrating curriculum-based ideological and political education,reforming assessment systems, and improving teacher development.This study offers references for local undergraduate universities to cultivate high-quality financial talents capable of meeting the demands of the AI-driven era.*

Keywords: *Artificial intelligence; local undergraduate universities; Financecourse; teaching method reform*

1. Introduction

The wide application of artificial intelligence is transforming the landscape of the financial industry.New business forms including intelligent risk control,quantitative trading,robo-advisory and blockchain-enabled finance are emerging continuously.Financial institutions are in urgent need of interdisciplinary talents with solid financial expertise as well as data analysis and intelligent technology application capabilities,accelerating the digital-intelligent transformation of financial talent cultivation.This trend brings opportunities yet poses severe challenges to finance education.Students are expected to master fundamental financial theories,develop competencies to analyze financial issues with digital tools,and uphold professional ethics while safeguarding national financial security.

Local undergraduate universities are positioned to cultivate application-oriented talents serving regional economic and social development.As a core fundamental course for economics and management majors,Finance lays a solid foundation for talent training and contributes to building a strong financial nation.Nevertheless,confronted with profound changes brought by artificial intelligence,the Finance course in local undergraduate universities still shows conspicuous mismatches in teaching philosophy,content, methods and assessment.As the primary platform for talent cultivation,classroom teaching reform largely hinges on how teachers guide class activities,how students' enthusiasm is stimulated,and how students' subjective initiative is unlocked.Interconnected and progressive,these three dimensions constitute core concerns for teaching method reform at the classroom level.Based on an analysis of underlying causes and combined with outcome-based education theories and realities of local universities,this paper explores concrete measures for Finance teaching reform by reshaping teacher-student dynamics in classrooms and constructing supporting systematic pathways.

2. Major Problems of the Finance Course in Local Undergraduate Universities in the AI Era

2.1 Disconnection between teaching content and industrial frontiers

Traditional Finance teaching is largely textbook-centered,focusing on basic theories concerning currency,credit,financial institutions and financial markets.It covers insufficient content on cutting-edge fields such as digital finance,fintech and AI-powered risk control under artificial intelligence.Outdated teaching content creates a notable gap between knowledge acquired in class and job-related competencies required in practice.This disconnect is especially prominent in local universities and undermines students' adaptability to the digital-intelligent transition of the financial sector.

2.2 Monotonous teaching approaches and marginalized student subjectivity

Many classes still adopt teacher-centered lecturing where students mainly take notes. Student-oriented approaches including case studies,scenario simulation and project-driven learning are seldom applied.Students are rarely provided with opportunities for active inquiry and hands-on practice to understand real-world financial applications.Teachers mostly deliver knowledge in a one-way manner and pay limited attention to stimulating students' learning motivation.As a result,students' enthusiasm and creativity are restrained,creating gaps between teaching outcomes and training objectives.

2.3 Deficiencies in practical teaching and technical tool adoption

Finance is highly practical and applied.Restricted by experimental platforms,data resources and faculty conditions,practical teaching remains weak in local universities.Students receive inadequate training in collecting,processing and analyzing financial data.They also lack awareness and competence to leverage AI tools for learning and solving real-world problems.The persistent theory-practice divide limits conditions for students to conduct independent inquiry and self-directed learning.

2.4 Simplified assessment modes and weakened educational functions

Course evaluation mainly relies on closed-book final examinations that emphasize knowledge memorization.Process-oriented,competence-based and value-added assessment are insufficient,making it hard to comprehensively evaluate students' growth in knowledge mastery, practical capabilities and ethical literacy.Assessment fails to fully realize its functions of diagnosis, motivation and guidance.Simplified evaluation mechanisms weaken feedback and incentives throughout learning,which discourages sustained student engagement and holistic development.

2.5 Insufficient teachers' digital literacy and superficial integration of ideological and political education

There is a shortage of interdisciplinary teachers proficient in both finance and digital technologies.Some instructors have limited command of artificial intelligence tools and lack motivation and capacity to improve teaching via new technologies.Besides,ideological-political elements are incorporated in a superficial and disjointed way in many cases.Value cultivation has not been organically unified with knowledge instruction and competence development, leaving room for improvement in teachers' ideological guidance in classrooms.

3. Objectives and Basic Principles of Finance Teaching Reform Under Artificial Intelligence

3.1 Reform objectives

Targeting the digital-intelligent transformation of the financial industry and demands of regional socioeconomic development,the overall objective of Finance teaching method reform guided by student learning outcomes is to integrate financial theories,digital skills and value education.It strives to cultivate application-oriented financial talents with sound political awareness,solid professional foundations,competent digital literacy,strong practical capabilities, and adaptability to intelligent finance.At the course and classroom level,students are expected to grasp core knowledge of currency,credit,banking and financial markets,and acquire preliminary capabilities to identify,analyze

and resolve financial problems using data analytics and artificial intelligence tools.Teachers should be capable of guiding classroom instruction with AI tools,while students are supposed to develop strong self-driven learning willingness,abide by core socialist values,observe financial professional ethics,and safeguard national financial security.

3.2 Basic principles

3.2.1 Adhere to outcome orientation

Following the reverse design logic connecting social demands,training objectives,course goals,teaching implementation and outcome assessment,teaching content and approaches are determined according to graduation requirement indicators to ensure reforms serve talent cultivation goals.

3.2.2 Prioritize technology empowerment

Artificial intelligence and big data are introduced into full teaching procedures to advance intelligent teaching instruments,resources and governance.

3.2.3 Uphold student-centered philosophy

Proper balance should be maintained between teachers' guidance and students' subject status. Motivating learning enthusiasm and unlocking subjective initiative should serve as starting points for teaching design.

3.2.4 Promote industry-university integration

Closely responding to demands from financial institutions and regional industries, school-enterprise collaboration strengthens practice-oriented education.

3.2.5 Implement moral education

Curriculum-based ideological and political education runs through the whole teaching process so that professional education and value cultivation advance hand in hand.

4. Reshaping Teacher-Student Learning Relationships in FinanceClassrooms Under Artificial Intelligence

Classroom teaching is where teaching method reform lands.In the AI context,the core of Finance teaching reform lies in optimizing teacher-student relationships and realizing the integration of teachers' guiding role and students' subject status.Joint efforts should be made from three dimensions:teachers' classroom guidance,stimulation of learning enthusiasm,and realization of students' subjective initiative.

4.1 Strengthen teachers' guidance and give play to their leading role

Teachers act as classroom facilitators.Instead of being weakened,their leading role should be enhanced and upgraded with the support of artificial intelligence tools.

4.1.1 Strengthen guidance in instructional design

Before class,teachers need to analyze learning situations and course objectives,carefully design teaching goals,question chains,scenarios and tasks focusing on key and difficult points. They should coordinate financial theories with AI application scenarios to lay foundations for high-efficiency classroom activities.

4.1.2 Strengthen guidance in classroom organization

Teachers should manage class rhythm through thought-provoking questions and targeted guidance,encouraging students to construct knowledge via reflection,discussion and analysis rather than simply receiving conclusions.

4.1.3 Strengthen guidance in teaching method selection

Based on teaching content and student conditions,teachers should flexibly combine lecturing, case studies,scenario simulation,project-driven learning and flipped classrooms.Teaching methods should accommodate learning approaches so that students gain genuine participation experience through diversified activities.

4.1.4 Strengthen technology-enabled guidance

Teachers can adopt AI-supported learning situation analysis,intelligent lesson preparation and instant feedback tools to identify students' learning obstacles and dynamically adjust teaching strategies,shifting from experience-based instruction to data-driven precise teaching.

4.1.5 Reinforce value-oriented guidance

Ideological and political education should be embedded throughout classroom sessions. Teachers should inspire students with personal charisma and patriotism, achieving the synchronization of knowledge transmission and value shaping.

4.2 Stimulate learning motivation and boost students' learning enthusiasm

Learning enthusiasm serves as the driving force for active learning.Its cultivation relies on triggering and sustaining learning motivation by combining external incentives and internal drivers.

4.2.1 Arouse interest through real-life scenarios

Financial knowledge is closely linked with daily life and economic hot topics.Teachers should create authentic scenarios such as investment decision-making and credit consumption,and adopt vivid financial cases to spark students' curiosity and intellectual curiosity.

4.2.2 Consolidate learning motivation through value guidance

Connect course learning with financial industry trends and job requirements,helping students perceive practical value of knowledge.This enhances their sense of purpose and achievement and fosters lasting internal motivation.

4.2.3 Improve learning experience through diversified participation

Interactive forms including in-class questioning,group discussion,role-play and outcome presentation offer every student opportunities for expression.Positive feedback gained from participation enhances their sense of self-efficacy in learning.

4.2.4 Realize differentiated motivation through tiered assignments

Respect gaps in students' prior knowledge and capabilities.Design multi-level tasks and questions to ensure learners at different levels can achieve a sense of accomplishment,avoiding the situation where only a small group of students get involved while others remain passive observers.

4.2.5 Enrich learning experience with technical tools

Leverage instant interaction,task challenges and point-reward functions on smart teaching platforms to enhance classroom engagement and competitiveness.In motivating students,external incentives should be complemented by cultivating internal aspirations to guide students from interest-driven learning to ambition-driven learning.

4.3 Highlight students' subject status and fully exert their subjective learning initiative

Students are the masters of learning.Giving full play to their subjective initiative represents a fundamental goal of teaching reform and a key standard for evaluating reform effectiveness.As artificial intelligence expands students' access to knowledge,teachers should genuinely transfer learning autonomy to students.

4.3.1 Promote autonomous learning

Adopt flipped classrooms and pre-class assignments to guide students to study materials independently and raise questions before class,enabling them to attend class with reflective thinking and achieve the shift from passive learning to active learning.

4.3.2 Advance inquiry-oriented learning

Adopt question-driven and inquiry-based learning modes.Students are encouraged to identify and analyze financial problems independently,retrieve information and conduct financial data analysis with artificial intelligence tools to construct and deepen knowledge in the process of exploration.

4.3.3 Promote collaborative learning

Group assignments,project cooperation and brainstorming enable students to inspire one another through communication and peer review,improving collaborative capabilities and cultivating sense of responsibility.

4.3.4 Build an open learning environment

Develop open-access course resource libraries,virtual simulation experiments and financial data platforms to support individualized learning and expand students' independent learning resources.

4.3.5 Introduce learner-oriented evaluation

Guide students to conduct self-assessment and peer evaluation,and write learning reflections to foster self-management awareness and lifelong-learning competence.In this process,teachers transform from lecturers into facilitators and coaches,while students shift from audience to learning subjects.Teachers and students jointly build dynamic classrooms supported by human-machine collaboration and two-way interaction.

5. Feasible Pathways for Finance Teaching Method Reform Under Artificial Intelligence

Reshaped teacher-student relationships in classrooms require systematic support from teaching content,platforms,practical training,assessment and faculty development.Multi-faceted coordinated measures lay solid foundations for teachers' classroom guidance and the realization of students' enthusiasm and subjective initiative.

5.1 Reconstruct teaching content to integrate financial knowledge and artificial intelligence

Keep pace with fintech developments.Incorporate artificial intelligence,blockchain,big-data finance,intelligent risk control and other frontier content into teaching,and set up special fintech modules to connect fundamental theories with digital-intelligent application scenarios.Teachers should help students understand financial logic behind technological transformations.Meanwhile, develop localized cases and teaching materials based on regional financial development features to enhance timeliness and pertinence of teaching,resolve disconnection between content and industrial frontiers,and provide real-world materials for students' independent inquiry.

5.2 Build smart classrooms and teaching resources supported by intelligent technologies

Construct online-offline integrated smart classrooms using smart teaching platforms and big-data analytics.Before class,push learning tasks and micro-lecture resources via platforms for targeted preview to facilitate flipped classrooms and self-directed learning.In class,improve participation and targeted instruction through instant interaction and learning-situation analysis to support precise teaching.After class,provide personalized tutoring and targeted feedback via intelligent question banks and AI teaching assistants.Integrate massive open online courses and virtual simulation experiments to build diversified course resource libraries and guarantee implementation of teaching reforms.

5.3 Deepen practical teaching and construct an industry-university collaborative training system

Improve financial comprehensive training centers and virtual simulation laboratories, optimize practical projects covering commercial banking,securities investment and financial risk management to realize in-depth integration of theoretical and practical teaching.Strengthen school-enterprise cooperation by introducing real-world business scenarios and data resources from financial institutions.Joint training bases and industry mentors bridge classroom instruction and job-site practice.Encourage students to participate in discipline competitions,financial simulation trading and innovation-entrepreneurship activities.Learning via competitions and practical training enhances students' capabilities to solve real-world financial problems with AI tools and stimulates learning passion through authentic tasks.

5.4 Integrate curriculum-based ideological and political education to coordinate professional training and value cultivation

Centered on fostering virtue through education,take China's financial development as the main thread,and dig out ideological-political elements embedded in knowledge points such as currency,credit, banking and risk prevention.Organically incorporate national financial security, financial ethics,integrity awareness and institutional confidence into teaching.Real-world cases concerning financial risk prevention,RMB internationalization and inclusive finance help students strengthen ideals,cultivate patriotism and observe professional integrity in professional learning. Curriculum ideological-political objectives correspond to moral-relevant graduation requirements to realize the unification of knowledge transfer,competence cultivation and value shaping.

5.5 Reform assessment systems and establish multi-dimensional process-oriented evaluation

Adopt competence and literacy oriented evaluation.Expand assessment coverage to include class performance,case analysis,practical training outputs,project deliverables and group discussions,and raise the weight of process-oriented evaluation to change the exam-centered assessment pattern.Evidence including class participation records,platform learning statistics and practical reports should be used to objectively reflect students' learning input and competence growth,giving full play to assessment's functions of diagnosis and motivation to drive continuous and active learning.Evaluation should cover values such as integrity,standard-abiding awareness and sense of responsibility,making assessment an important instrument for promoting students' holistic development and moral education.

5.6 Strengthen faculty development and improve teachers' digital literacy

Improve teachers' capabilities in applying artificial intelligence for teaching and research through special training,teaching workshops and enterprise on-the-job practice.Encourage interdisciplinary collaboration and build teaching teams integrating finance and technology to cultivate interdisciplinary faculty.Optimize incentive and guarantee mechanisms.Teachers' digital literacy and teaching reform outcomes should be considered in performance appraisal and professional title evaluation to motivate teachers to engage in teaching innovation,enhance classroom guidance capabilities and improve implementation of ideological-political education.

6. Conclusion

Artificial intelligence creates vital opportunities yet sets systematic requirements for Finance teaching reform in local undergraduate universities in terms of curriculum objectives,content systems,teaching approaches,assessment and faculty construction.It should be noted that integrating artificial intelligence into finance education is far more than simply adding new technology courses;it represents profound reshaping of talent cultivation models.Teaching should shift from knowledge-orientation to balanced competence-and-value orientation,from one-way knowledge transmission to interactive human-machine collaborative learning,and from closed classrooms to open industry-university integrated learning contexts.At the classroom level,the balance between teachers' guidance and students' subject status should be maintained. High-quality teacher-led classroom instruction drives sustained learning enthusiasm,and the extent to which students' subjective initiative is unlocked serves as a key indicator of reform effectiveness.Based on application-oriented positioning,local undergraduate universities should adhere to outcome-based education,technology empowerment,student-centered concepts, industry-university collaboration and moral education.Systematic reforms of the Finance course will cultivate virtuous and competent financial talents for the digital-intelligent era,providing talent support for regional socioeconomic progress and building a strong financial nation.

Fund Project

Educational Research Project of Hubei Higher Education Association in 2023(2023ZA019).

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