Research on the Teaching Reform of Capital Operation Course: Digitally-enabled Innovation

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Abstract: Under the wave of the age of digital intelligence, the teaching of the course "Capital Operation" ushers in the opportunity of change and many challenges. This study takes digital intelligence as the core and explores the teaching reform practice of the course in depth. On the one hand, Course team fully integrate big data, artificial intelligence and other cutting-edge digital technologies to create a rich and diversified teaching resource library and platform, which provides a large amount of accurate and practical teaching materials and cases for the course, and helps students understand the theoretical essence and practical points of capital operation in depth and intuitively. On the other hand, with the help of digitalized teaching tools, the teaching methodology has been innovated to stimulate students' enthusiasm and participation. In addition, Course team emphasize the organic integration of ethical and moral education and professional education in the course teaching, and in the process of teaching professional knowledge and skills of capital operation, Course team guide students to think deeply about the ethical and moral norms and social responsibilities in capital operation activities, and cultivate their professional ethics of adhering to the moral bottom line and following the legal norms in the complex business environment. Practice has proved that Digital Intelligence EmpoCourse teamreent has not only promoted the innovation of the teaching mode and the improvement of the teaching quality of the Capital Operation course, but also facilitated the synergistic development of students' professionalism in capital operation, their ability to apply digital intelligence and their ethical and moral qualities.

Keywords: Digital intelligence empowerment, Capital operations course, Teaching reform, Ethics education.

1. Introduction

With the arrival of the era of digital intelligence, accelerating the change of education in the information age, using modern technology to accelerate the promotion of talent training mode reform, and realizing the organic combination of large-scale education and personalized training is the new goal of current education. At the same time, higher education is facing higher requirements, and colleges and universities must focus on the quality of talent cultivation and actively carry out the reform of talent cultivation mode when carrying out professional education. And how to change the current existence of indoctrination, duck type teaching, strengthen the practice link, improve the management mode, so that the course teaching mode and the information age of society on the demand for multi-level talents, professional development and students' internal demand, is a problem worth paying attention to. Especially in combining the professional characteristics of accounting and finance, exploring innovative modes of teaching and learning in higher education courses, promoting the mathematical and intellectual transformation and sharing of high-quality resources, opening up a new form for teaching and learning in higher education, and implementing the action of mathematical and intellectual strategic empowerment are the new positioning, new deployment, new requirements and new tasks for the development of higher education. Empowering higher education with digital intelligence is expected to realize the organic integration of common learning and personalized learning, thus contributing to the construction of a learning society and a learning power.

The course of Capital Operation covers the important strategic decisions in the operation of enterprises and has an important position in the accounting profession. Through the study of Capital Operation, it can help students understand the operation mechanism of the capital market, the ways and strategies of corporate financing, the analysis methods of investment decisions, etc., and cultivate the practical ability

and strategic vision in the capital market. In addition, capital operation contains important moral and ethical elements such as "social responsibility", "integrity and compliance", "global vision and international competition", "financial security and risk prevention", "professional ethics", etc., which helps students to establish correct values and enhance the sense of integrity and compliance, so that they can have ethical literacy, social responsibility and professional competence. With the advent of the age of digitalization, the techniques and methods of capital operation are undergoing drastic changes, which requires the cultivation of complex and highly qualified talents who can break through fixed thinking, have practical operation ability, and use modern technological tools for capital operation.

Making full use of digital intelligence to empower teaching reform, integrating online and offline teaching, and constructing a multidimensional education model. Using modern information technology and network resources and other intelligent means to create a broader learning space for students and open up a personalized learning path suitable for them. Promoting the synergy between the professional learning of the course and the ideological and political education, making them work in the same direction, enhancing the students' ideological awareness and morality, and strengthening their ability to cope with challenges and problems, so as to adapt to the requirements for students' hands-on skills and creative thinking in the new era, is the inevitable road for the reform of the "Capital Operation" course in the era of digitization and intellectualization.

2. Overall Instructional Design of Capital Operations Course by Digitally-enabled technology

2.1 Current Status of the Teaching of the Capital Operation Course

The Capital Operations course is a cross-disciplinary course characterized by practice and application, which combines financial management, financial accounting, finance and investment, and mainly covers asset pricing theory, portfolio management, risk assessment and control, the use of financial derivatives, capital restructuring and market innovation. The course mostly adopts the traditional teaching mode, and there are three main problems.

First, the effectiveness of the combination of curriculum and digital intelligence technology is not strong. Modern educational technology is a product of digitalization, and the reasonable use of modern technology can effectively promote the construction of the curriculum. At present, the teaching of the capital operation course is still limited by the traditional teaching mode, which often adopts the traditional lectures and case studies, and lacks the effective integration of digital intelligence tools and technologies. Students' exposure to content is concentrated in written materials and static case studies, making it difficult to realistically simulate and analyze the dynamic changes of the real market in real time. At the same time, teachers' use of digital intelligence technology is often limited to post-course evaluations, such as tracking students' learning through the electronic version of assignments on the teaching APP, which is a single technological tool with poor teaching effectiveness.

In addition, students' individual knowledge reserves and comprehension abilities are different, so how to innovate the teaching implementation path, not only to complete the teaching task of common learning, but also to meet the needs of students to use fragmented time for personalized learning, and to increase the effectiveness of the course is one of the important themes in the innovation of the teaching mode of the Digital Intelligence Empowerment Course.

Second, the curriculum is not closely related to moral and ethical education. Comprehensively promoting moral and ethical education in the curriculum is an important initiative of curriculum reform, and also an important task of building a quality education system and optimizing the positioning of education types. At present, the design of the capital operation course mainly focuses on the teaching of professional knowledge and skills, and less systematically integrates the content of moral and ethical education, favoring professional knowledge such as financial market theory, investment strategy, risk management, and lacking the organic combination and in-depth exploration of moral and ethical elements such as social responsibility, risk prevention and professional ethics. At the same time, the courses lack cases and examples of integrating moral and ethical education into professional knowledge, which makes it difficult for students to realize the importance and practical significance of moral and ethical education in their professional learning.

Thirdly, the assessment mechanism of the curriculum is homogenous. Advanced evaluation and assessment mechanisms effectively respond to students' learning and help teachers improve their teaching. The capital operation course mainly relies on final exams and stage quizzes, focuses on assessing students' mastery of theoretical knowledge, neglects the evaluation of practical operation ability, comprehensive quality and civic education, and lacks comprehensive assessment of students' teamwork, communication and expression, leadership and social responsibility, etc. The assessment standard fails to be differentiated, and the feedback mechanism is imperfect, which leads to difficulties in comprehensively reflecting the students' actual ability and growth needs.

2.2 Overall Instructional Design Philosophy of the Capital Operations Course

The overall teaching design concept of the course is based on the students' learning situation, and is committed to cultivating application-oriented talents through the use of modern information technology, big data software and network resources and other intelligent means. At the same time, the teaching design is optimized based on the needs of social talents, practical links are strengthened, value elements are deeply excavated, and the path of moral education is innovated. It also builds a multi-dimensional assessment system to improve the teaching effect and cultivate students' professional ability and comprehensive literacy.

Relying on the technical support of the University's Network Center and Super Star Group, various social software (WeChat, QQ, etc.), the website of the fine courses and other online platforms to strengthen course management. Using information technology such as knowledge mapping and mind mapping to condense the key teaching and learning points and enhance the challenge of the courses. Using big data analysis to track the learning situation of the students, and online assessment system to assist in the assessment of ethical education. Teaching design, educational means and methods are revolutionized, and examination methods are improved to promote the in-depth integration of information technology with teaching and learning, so that teachers' teaching and students' learning are truly seamlessly connected. Utilizing the Internet resources and combining with actual capital operation cases, we have deeply explored the hidden ethical and moral elements in the capital operation course, prepared cases for Civics and Politics teaching, given play to the role of the main channel of classroom teaching, strengthened the orientation of nurturing people in professional courses, given play to the guiding role of ethical and moral education, and achieved the synchronization of ethical and moral education and the teaching of professional courses.

3. Innovative Points for Teaching Reform of Capital Operation Course by Digitally-enabled Technology

3.1 Integration of Advanced Digital Intelligence Technologies in Teaching and Learning

The course team uses knowledge mapping technology to systematize and structure the knowledge points, concepts and relationships of the Capital Operations course to help teachers identify and excavate the key and difficult points in teaching, visualize the relationships between the knowledge points, and track and analyze students' learning paths and status. Through the collection and analysis of students' learning data, common problems and individual differences encountered by students in the learning process can be discovered, and teaching strategies can be adjusted in a targeted manner. With the help of generative AI technology, personalized teaching plans and learning plans are automatically generated based on the knowledge graph and students' learning data, and the optimal teaching paths and content arrangements are designed by combining the course objectives, teaching key points and students' specific conditions, and assisting teachers in teaching design, providing creativity and inspiration, and enhancing the quality and efficiency of teaching design.

3.2 Deeper Integration of Ethics Education and Professional Education

The course team makes full use of the digital intelligence technology to explore the ethical and moral elements, and designs special ethical and moral cases and discussion sessions in the course, integrating the contents of responsibility, resource conservation and social responsibility into the teaching of capital operation. For example, by analyzing major national economic policies and CSR cases, students can understand the impact of policies on corporate operations and capital market, and at the same time cultivate students' sense of social responsibility and correct values. Through thematic discussions, case studies and practical activities, students' understanding of national economic policies is enhanced, and students' patriotic sentiment and sense of social responsibility are cultivated.

3.3 Diversified Assessment System

The course team uses the digital teaching platform to build a diversified assessment system that includes project reports, case studies, simulation operations, dynamic assessment and evaluation of the effectiveness of ethics education. The project report and case analysis require students to apply theoretical knowledge to practical problems, while the simulation operation allows students to conduct real market simulation transactions and enterprise management through the virtual platform. Dynamic assessment provides a comprehensive assessment through classroom performance, interaction and participation, while ethical and moral effectiveness assessment examines students' understanding and practice of social responsibility in the course. This diversified assessment system can comprehensively and objectively reflect the learning effect and comprehensive quality of students, and help students identify deficiencies and make continuous improvement.

4. Results of Teaching Reform of Capital Operations Course by Digitally-enabled Technology

The teaching reform is being fully promoted and applied in the class of 2021 in the Financial Management program of Guangdong Institute of Science and Technology. At present, it has achieved several progresses and good teaching effects. In terms of teaching, based on the digital intelligence platform, we have carried out in-depth integration of course ideology and politics, through teamwork, resource sharing, case studies and independent research and development projects, etc., to integrate the concepts of "social responsibility", "risk taking", "resource saving", "innovation driving" and "professionalism" into the curriculum. The concepts of "social responsibility", "risk taking", "resource saving", "innovation driving" and "professional ethics" are introduced into the classroom and the whole process of students' learning, focusing on the cultivation of students' core values and ethical morality, and emphasizing the integration of moral education elements into the curriculum, as well as the integration of knowledge transmission and value guidance into the curriculum. The organic combination of knowledge transfer and value guidance is emphasized.

Table 1: Leaching content & ethical and moral elements of the capital operations course.						
Teaching content	ethical and moral elements					
Basic theory of capital operation	a. Socialist core values: It is emphasized that capital operation should serve the overall situation of social and economic development, reflecting the concepts of "wealth and strength, democracy, civilization and harmony" in socialist core values.b. Integrity and law-abiding: capital operations must comply with laws and regulations, operate in good faith, and must not jeopardize the interests of the state, society and the public.					
Capital Financing	a. Risk awareness and responsibility: in the process of capital financing, it is necessary to give full consideration to risk, reasonably control the scale of debt, avoid over-indebtedness, and reflect the responsibility of the enterprise.b. Integrity financing: emphasize that enterprises should be honest and trustworthy in the financing process, and should not make false claims and deceive investors.					
Capital Investment	a. Sustainable development: When investing capital, consider the long-term benefits and sustainable development of the project and avoid short-sighted behavior.b. Social Responsibility: When making capital investment, enterprises should pay attention to social responsibility, actively participate in public welfare and give back to the society.					
Capital turnover	 a. Efficiency and efficiency: emphasize the impact of the speed and efficiency of capital turnover on the operating efficiency of enterprises, and guide students to establish a sense of efficiency. b. Resource conservation and environmental protection: In the process of capital turnover, it is necessary to pay attention to resource conservation and environmental protection to realize green development. 					
Capital accumulation	 a. Long-term planning: capital accumulation requires long-term planning and continuous efforts, guiding students to establish a long-term vision and a spirit of struggle. b. Innovation-driven: emphasizing that innovation is an important driving force for capital accumulation, encouraging students to be innovative and pursue excellence. 					
Capital reorganization	a. Win-win cooperation: the process of capital reorganization should focus on the balance and coordination of the interests of all parties to achieve win-win cooperation.b. Legal concept: emphasize that capital restructuring must follow laws and regulations to ensure legal compliance.					
Implementation of shareholding system	 a. Protection of shareholders' rights and interests: in the shareholding system, it is necessary to effectively protect shareholders' rights and interests and safeguard shareholders' interests. b. Modern enterprise system: shareholding system is one of the important forms of modern enterprise system, guide students to understand the characteristics and advantages of modern enterprise system. 					
Mergers and Acquisitions	a. Fair Competition: Mergers and acquisitions should follow the principle of fair competition and should not resort to unfair means.b. Social responsibility: In the process of mergers and acquisitions, attention should be paid to issues such as social responsibility and employee welfare.					

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Volume 6 Issue 12 2024 http://www.bryanhousepub.com

In terms of students' learning, the teaching effect of the course was tracked through the teaching quality evaluation questionnaire survey of the teaching platform, in terms of students' satisfaction in terms of course objectives and content, teaching methods and forms, assessment and learning outcomes. Among them, 90 students participated in the teaching quality evaluation survey, with 72 effective evaluations and 80% effective rate of the questionnaire, and the results are shown in Table 2.

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Evaluation Indicators	Satisfaction	Excellent	Good	Medium	Qualified	Unqualified
The course learning objectives are consistent with my professional learning and career development needs.	99.79%	71	1	0	0	0
I am aware of the learning objectives and assessment requirements of the course.	99.58%	70	2	0	0	0
I have studied the complete content of the course and the course learning materials are helpful to my learning.	99.79%	71	1	0	0	0
I have learned the cutting edge knowledge of my subject specialization and the development of the society and industry.	99.58%	70	2	0	0	0
I have understood the emotional and value dimensions associated with the course.	99.16%	68	4	0	0	0
I have improved my professional qualities, including learning, thinking, expression, action and willpower.	99.37%	69	3	0	0	0
Teaching methods and information technology have facilitated my learning.	99.58%	70	2	0	0	0
The assessment methods of the course focus on evaluating the learning process and comprehensive abilities.	99.16%	68	4	0	0	0
Innovative teaching design stimulates my interest in learning this course.	98.95%	67	5	0	0	0
The rich teaching forms encourage me to actively participate in learning and interact with teachers and classmates.	99.58%	70	2	0	0	0
Through this course, I have mastered the professional knowledge and skills of related disciplines.	99.79%	71	1	0	0	0
Through this course, I have improved my practical ability and innovation ability.	99.16%	68	4	0	0	0

From the survey results, it can be seen that the Capital Operation course has shown remarkable results in many aspects after the reform of digital intelligence. From the perspective of course objectives and content, the course is highly compatible with students' professional learning and career development, with 99.79% of the students believing that the course learning objectives meet their own needs, and gaining nearly perfect satisfaction in terms of the clarity of the learning objectives, practicality of the materials, the frontiers of knowledge, and improvement of their professional qualities. This fully demonstrates that the course is well-planned, full of content and up-to-date, and can help students grow in all aspects.

In the field of teaching methods and forms, both teaching methods and information technology means to promote learning, innovative teaching design to stimulate learning interest and rich teaching forms to promote students to actively participate in the interaction, etc., have been highly recognized by students, with a satisfaction rate of 98.95% and above. This shows that the teaching methods of the course are rich in diversity and creativity, which successfully create a positive and active learning environment and effectively enhance students' learning experience and motivation.

As for the dimension of assessment and learning outcomes, the course assessment focuses on the learning process and comprehensive ability evaluation, and students have also achieved optimistic results in mastering professional knowledge and skills as well as enhancing their practical and innovative abilities, and their satisfaction levels are at a high level.

5. Summary

According to the characteristics of the finance and accounting profession, this course combines the direction of curriculum reform in the era of digital intelligence, optimizes the curriculum and improves the teaching design in order to help teachers improve their teaching ability. It also promotes the digital transformation and sharing of quality resources through the content expansion and function improvement of the digital platform. Through these efforts, the teachers of this course team have successfully promoted the synergistic development of the course's professional learning and ethics education comb. In addition, students' ability to apply the theoretical knowledge of capital operation and financial analysis methods to solve the problems of corporate capital operation in practice has been enhanced, practice has been strengthened, identification with the profession has been improved, social responsibility has been enhanced, and innovation ability has been cultivated, and at the same time, they have become more concerned about and aware of financial and economic issues. In this way, the teaching reform of this course under the Digitally-enabled technology has truly realized the merging of moral education and knowledge system education into one.

Acknowledgments

Guangdong University of Science and Technology 2024 "Quality Project" Program: Teaching Reform and Practice of Digital-Enabled Capital Operation Course. No: GKZLGC2024205.

References

[1] Scholes S M. Artificial intelligence and uncertainty [J]. Risk Sciences,2025,1100004-100004.

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- [2] Shanshan C. Exploration of the Application of Artificial Intelligence Technology in Primary Education in Hong Kong[J]. Advances in Educational Technology and Psychology,2024,8(6):
- [3] Tan Lan. Digital empowerment and integration of craftsmanship - A study on the teaching reform of international finance courses in colleges and universities [J]. Foreign trade and economics, 2024, (11):106-110.
- [4] Chen Yue. Exploration of the reform path of higher vocational digital finance talent cultivation under the background of digital intellectualization transformation [J]. Modern Business Industry, 2024, (24): 20-23.
- [5] Wang Yuanlong, Pang Jifang, Zhang Hu, et al. Teaching reform of database course in the context of digital era[J]. Computer Education, 2024, (11):121-125.
- [6] Zhang Mei. Research on Auditing Curriculum Reform Path under the Background of Intelligent Auditing[J]. Science and education literature, 2024, (21):132-135.
- [7] Wang Shujuan. Reflections on the cultivation of accounting professionals in higher vocational colleges and universities in the context of the era of digitalization [J]. Talent, 2024, (31):165-168.
- [8] Chen Shaobo, Fang Yuanyuan. Reform and Innovation of Teaching Mode of Accounting and Finance Professional Course under the Background of Digital Transformation[J]. Old Brand Marketing, 2024, (20): 195-197.
- [9] An X. Digital intelligence driven and elemental energy cultivated together: Teaching application and method innovation based on artificial intelligence[J]. Advances in Engineering Innovation,2023,1(1):16-21.
- [10] Zhang P. Transformation of Financial Management in Universities in the Era of Digital Intelligence [C]//Shandong Normal University,2023:
- [11] V. O S, V. I S, V. A T, et al. Artificial Intelligence as Effective Digital Transformation Legal Means of Business, Management, Economy and Technology [J]. SHS Web of Conferences,2021,110
- [12] Chad S. Technology Skill Development Among Education Majors[J]. The Journal of Technology Studies, 2014,40(1/2):2-10.