Reform in Practice Teaching Models of Digital Economy Courses under the Context of New Quality Productive Forces

Li Li, Manman Li

Hainan Vocational University of Science and Technology, Haikou, Hainan Province, China 571126

Abstract: New Quality Productive Forces are centered around innovation and marked by the improvement of Total Factor Productivity. Their development cannot be achieved without the enabling support of the digital economy. Meanwhile, the practical competency cultivation of digital economy talent relies on a high-quality curriculum-based practice teaching system. Current practice teaching of digital economy courses suffers from several significant issues, such as disconnection from the development demands of New Quality Productive Forces, rigid teaching models, lag in practice content, and undeveloped collaborative education mechanism, failing to cultivate multi-skilled practice-oriented talent aligned with industrial evolution. This study is grounded in the core literacy requirements of New Quality Productive Forces for digital economy talent, deeply analyzes the shortcomings in current practice teaching models, explores the reform pathways of practice teaching models across five dimensions—teaching content reengineering, teaching method innovation, practice platform establishment, faculty team construction, and evaluation system optimization—aiming to solve teaching problems, improve the practice teaching quality of digital economy courses, and provide digital talent with innovation mindset and practical competencies for the advancement of New Quality Productive Forces, achieving resonance between education and industries.

Keywords: New Quality Productive Forces; Digital Economy; Practice Teaching; Model Reform; Talent Cultivation

DOI:10.12417/3029-2328.26.02.013

1.Introduction

Because the digital economy serves as an important component of New Quality Productive Forces, the integrated application of data factors emerges as a pivotal enabler driving the advancement of New Quality Productive Forces, propelling profound changes in production methods, innovation models and economic growth pathways. The digital economy courses serve as the core vehicle for cultivating digital talent, and its practice teaching components directly determines the quality and industry-alignment of talent cultivation. They are the key bond bridging theoretical knowledge and industrial practice and realizing the precision alignment between talent supply and industry demand. Currently, the conventional practice teaching models of digital economy courses fail to meet the development demands of industrial digitalization and digital industrialization in the context of New Quality Productive Forces. There are numerous problems that urgently need to be addressed. Therefore, conducting in-depth exploration of the reform in the practice teaching models of digital economy courses, addressing teaching challenges, and enhancing students' practical innovation capabilities have become an urgent task for higher education to adapt to the advancement of New Quality Productive Forces and cultivate high-quality digital talent.

2.Core Requirements for Practice Teaching of Digital Economy Courses in the Context of New Quality Productive Forces

In the context of New Quality Productive Forces, the rapid development of the digital economy has put forward higher demands on the practical competencies of digital talent, and has also defined the core orientation for the practice teaching of digital economy courses. Different from traditional digital talent cultivation, the digital talent required by New Quality Productive Forces need to possess theoretical literacy, technical application capabilities, innovation mindset and interdisciplinary integration capabilities. This requires the practice teaching of digital economy courses to break through the limitations of traditional teaching, ground itself in the industry demands, and focus on the cultivation of core capabilities.

From the perspective of competency cultivation, practice teaching should focus primarily on three core dimensions [1]. The first is the application capabilities of data factors, requiring students to be proficient in using

digital technology to extract, analyze and apply data factors, achieving the deep integration of data with traditional production factors, and leveraging data as a fundamental resource and an innovation enabler. The second is cross-domain integration implementation capabilities. New Quality Productive Forces prioritize the integration of cross-domain technologies and synergetic industrial articulation. Digital talent must possess the capability to integrate digital technology with diverse industrial contexts, enabling practical resolution of real-world challenges in industrial digital transformation. The third is innovation breakthrough capability. New Quality Productive Forces essentially lie in innovation. Practice teaching must catalyze students' breakthrough from conventional cognitive paradigms and conduct exploration in areas, such as the application of digital technology and innovation in business models, in order to cultivate innovation mindset and achievement transformation capability.

Meanwhile, in the context of New Quality Productive Forces, the practice teaching of digital economy courses needs to follow the principles of compatibility and dynamic responsiveness. The compatibility principle requires that the teaching content and methods of practice teaching precisely align with the industrial evolution, rigorously aligned with real-world demands and cutting-edge technological deployment in industrial digital transformation. The dynamic responsiveness principle requires that the practice teaching system can respond promptly to the development changes of the digital economy and New Quality Productive Forces, update the teaching content and practice scenarios in real time, and ensure that talent cultivation always keeps pace with industrial evolution.

3.Prominent Problems in the Current Practice Teaching Models of Digital Economy Courses

3.1 The Practice Teaching Content Lags Behind Industrial Evolution and Is Disconnected from the Industry Demands

Practice teaching content is the core of practice teaching. Currently, outdated practice teaching content of the digital economy courses fails to align with the frontier industry demands in the context of New Quality Productive Forces. The practice content of certain courses still mainly centers on the application of traditional digital technology, emphasizing basic operation training, while lacking integration of integrated application of data factors, cutting-edge digital technology, and industrial digitalization scenarios, seriously disconnecting from real-world industrial application scenarios. Meanwhile, the practice content lacks systemic coherence and hierarchical progression. It is mainly centered on verification practice of single module, lacking comprehensive and innovative practical tasks, struggling to cultivate students' capability to solve complex real-world challenges, and failing to meet the demands of the New Quality Productive Forces for multi-skilled digital talent.

3.2 The Teaching Models Have Become Rigid and Lack Innovation

Currently, the practice teaching of digital economy courses mostly employs the traditional model of "theoretical explanation + simulation operation", with relatively rigid teaching methods, lacking innovation and interactivity [2]. During the teaching process, instructors take the leading role, while students mostly passively receive knowledge and complete the established operational tasks, lacking the space for proactive exploration and innovative practice. This petrified teaching model stifle learner agency and innovation mindset, impeding the cultivation of autonomous learning capability and practical innovation capacities—directly antithetical to the core innovation thrust of New Quality Productive Forces. Furthermore, online-offline integration of practice teaching is not deep enough, failing to adequately leverage the flexibility of online teaching and the efficacy of offline teaching, and struggling to achieve spatiotemporally unconstrained and comprehensively scoped practice teaching.

3.3 The Practice Platforms Are Undeveloped, with Insufficient Support Capabilities

Practice platforms are an important vehicle for conducting practice teaching. Currently, the practice teaching platforms for digital economy courses suffer from problems such as insufficient quantity, monolithic functionality, and resource scarcity, failing to support the implementation of high-quality practice teaching. Certain educational institutions lack special digital economy practice laboratories, and the existing laboratories do not update their equipment and technologies in a timely manner, failing to meet the practice teaching demands of cutting-edge digital

technology. Meanwhile, the development of off-campus practical training bases lags significantly behind educational and industrial demands. School-enterprise cooperation mostly remains superficial, lacking in deep collaboration. Enterprises haven't been able to engage in the practice teaching process, failing to provide students with authentic industrial practice scenarios and project resources. As a result, the practice teaching becomes merely a formality, struggling to achieve the deep integration of theory and practice.

3.4 The Faculty Teams Possess Weak Practical Competencies and Insufficient Compatibility with the Practice Teaching

Faculty teams are the key safeguards for the quality of practice teaching. Currently, the faculty teams for digital economy courses have shortcomings, such as weak practical competencies and insufficient industry experience, failing to meet the demands of practice teaching in the context of New Quality Productive Forces. Most instructors are fresh graduates from higher education institutions, with deficit in frontline industrial immersion. They have insufficient understanding of the cutting-edge technologies in the digital economy industry and the transformation practice of industrial digitalization, failing to precisely grasp the key points and directions of practice teaching and to effectively guide students to carry out industry-aligned practical activities. Furthermore, the continuous learning and training mechanism for instructors is fragmented and undeveloped, making them struggle to update their knowledge structure promptly and master the latest digital technologies and teaching methods. This, in turn, affects the effectiveness and quality of practice teaching.

3.5 The Evaluation Systems Exhibit Scientific Inadequacy and Perverse Incentive Misalignment

A scientific evaluation system is an important driving force for promoting the reform in practice teaching and improving teaching quality. However, the current evaluation systems for practice teaching of digital economy courses exhibit perverse incentive misalignment. The evaluation methods are rather monolithic, mainly relying on practice reports and simulation operation results, focusing on evaluating students' practice results while neglecting the assessment of the practice process, innovation mindset, and problem-solving capabilities. The evaluation entities are relatively monolithic, mainly teachers, lacking the third-party evaluation entities, such as such as enterprises and industry associations. As a result, the evaluation results fail to comprehensively reflect students' practical competencies and their industry-alignment. Furthermore, the evaluation criteria lack specificity and flexibility, failing to make differentiated evaluation criteria based on the competency requirements of New Quality Productive Forces for digital talent. As a result, they make the evaluation systems fail to effectively leverage their incentive realignment and behavioral steering efficacy [3].

4.Pathways for the Reform in Practice Teaching Models of Digital Economy Courses under the Context of New Quality Productive Forces

4.1 Reengineering the Practice Teaching Content to Align with the Frontier Industry Demands

Reengineering the practice teaching content is the core of the reform. It should be grounded in the development needs of New Quality Productive Forces and align closely with the industrial frontier to construct a systematic, hierarchical and innovative practice teaching content system. The first step is to integrate cutting-edge digital technologies and data factor application content, abandon outdated practice modules, and add related practice content, such as data mining and analysis, and the integrated application of digital technology, in order to guide students to master the core data factor application capabilities. The second step is to establish a progression practice content system across three tiers: "fundamental practice → integrated practice → innovative practice". The fundamental practice focuses on training students in basic operation of digital technology, laying the solid foundation for their practical competencies. The integrated practice centers on industrial digitalization scenarios, and sets integrated practice tasks across multiple modules and fields to cultivate students' cross-domain integration capabilities. The innovative practice revolves around industrial pain points and frontier technologies, guiding students to carry out innovative practice and achievement transformation, and fostering their innovation mindset. The third step is to

enhance the alignment between practice content and the industry reality, conduct in-depth research on the demands of industrial digitalization, and integrate authentic enterprise projects and real-world industrial problems into the practice teaching content, ensuring the practicality and relevance of practice content.

4.2 Innovating Practice Teaching Methods to Ignite Learner Agency

It is imperative to break through the limitations of the traditional teaching models, innovate practice teaching methods, prioritize learner sovereignty, and ignite learner agency and innovation mindset. The first is to implement project-based learning, and use authentic enterprise projects and real-world industry problems as the vehicle to guide students to conduct practical research around the projects, enabling them to master theoretical knowledge and practical competencies during the process of project completion, and fostering their problem-solving capabilities. The second is to deepen online-offline integrated teaching, leverage online teaching platforms to build digital practice resource libraries, providing services, such as virtual simulation experiment and online practical guidance, enabling spatiotemporally unconstrained practice teaching. Offline teaching will focus on interaction and communication, practical operation guidance and innovative exploration, achieving complementary advantages between online teaching and offline teaching, and constructing a spatiotemporally unconstrained smart practice teaching model. The third is to implement case-based teaching and situational teaching, select typical cases in the process of industrial digitalization, and create authentic industrial practice scenarios to guide students experience the application scenarios of digital technology firsthand, thereby enhancing their practical application capabilities and scenario-alignment capability.

4.3 Improving Practice Platforms to Strengthen Their Teaching Support Capabilities

It is necessary to establish a "on-campus + off-campus" synergistic collaboration practice platform system, and strengthen its supporting capacity for practice teaching to provide strong safeguards for the implementation of practice teaching. The first is to strengthen the construction of on-campus practice platforms, upgrade and renovate the existing digital economy practice laboratories, build virtual simulation experiment platforms and integrated platforms for smart practice teaching, integrate digital practice resources, achieving intelligent and standardized management of practice teaching, establish digital practice resource libraries, and integrate micro-lesson videos, virtual simulation experiments, and authentic enterprise cases, etc., to ensure synchronous update of teaching content and industrial practice [4]. The second is to deepen the construction of off-campus practice bases, establish a government-industry-academia-research-association collaborative education ecosystem, strengthen in-depth cooperation with digital economy-related enterprises and industry associations, jointly build off-campus practice bases, and guide enterprises to engage in the entire process of practice teaching, providing students with authentic practice scenarios, project resources and mentors. The third is to promote resource sharing among practice platforms, and strengthen cooperation among practice platforms of different educational institutions and regions to achieve resource complementarity, and enhance the utilization rate and supporting efficacy of practice platforms.

4.4 Strengthening the Construction of Faculty Teams to Enhance Their Practice Teaching Competencies

Building a high-quality faculty team with theoretical literacy, practical competencies and industrial immersion is the key to improving the quality of practice teaching. The first is to improve the faculty recruitment and cultivation mechanism to introduce digital economy professionals who possess frontline industrial immersion, to enhance the faculty teams, establish a faculty continuous learning and training mechanism to regularly organize teachers to engage in industrial training, academic exchanges and practical research, guide them to deeply understand industrial cutting-edge technologies and practice demands, update their knowledge structure and enhance their practice teaching competencies. The second is to establish a double-qualified dual-mentor teaching team, integrate on-campus interdisciplinary faculty resources, and collaborate with corporate technological backbones and experts from research institutions to form a teaching collaboration and project guidance team, achieving complementary advantages of faculty resources, and encourage teachers to conduct practical training in enterprises, and engage in

corporate project R&D to accumulate industrial practical experience, and enhance their practical guidance capabilities. The third is to deploy intelligent teaching auxiliary tools, such as AI companions, to catalyze teachers to carry out intelligent teaching, thereby enhancing teaching efficiency and the specificity of guidance.

4.5 Optimizing the Practice Teaching Evaluation Systems to Fortify their Incentive Realignment and Behavioral Steering Efficacy

It is imperative to establish a scientific, reasonable, and highly-targeted practice teaching evaluation system to change the evaluation orientation, and adequately leverage fortify incentive realignment and behavioral steering efficacy. The first is to refine the evaluation content and criterion, transcend the single outcome-oriented evaluation model, and incorporate the practice process, innovation mindset, problem-solving capabilities, achievement transformation capabilities, etc. into the evaluation scope, and make differentiated and personalized evaluation criterion based on the competency requirements of New Quality Productive Forces for digital talent to ensure targeted and scientific evaluations [5]. The second is to enrich the evaluation entities, and establish a muti-stakeholder evaluation entity system that integrates teacher evaluation, student self-evaluation, peer evaluation, enterprise evaluation, and industry association evaluation to comprehensively reflect students' practical competencies and their industry-alignment. The third is to innovate the evaluation methods, employ a combination of process-oriented evaluation and outcome-oriented evaluation, strengthen the dynamic monitoring and evaluation of the practice process, and utilize digital evaluation tools to achieve intelligent and efficient evaluation process, and enhance the objectivity and fairness of the evaluations.

5.Conclusion

In the context of New Quality Productive Forces, the rapid development of the digital economy has placed higher demands on the practical competencies of digital talent. Reforming the practice teaching models of digital economy courses has become an urgent task for cultivating high-quality digital talent and aligning with industry demands. Current practice teaching of digital economy courses suffers from several prominent problems, such as outdated practice content, rigid teaching models, undeveloped practice platforms, weak practical competencies of faculty teams, and unscientific evaluation systems, which seriously affect the quality of talent cultivation. By reengineering the practice teaching content, innovating teaching methods, improving practice platforms, strengthening the construction of faculty teams, and optimizing the evaluation systems of practice teaching, we can effectively address the teaching challenges and improve the practice teaching quality of digital economy courses, cultivate digital talent who possess theoretical literacy, practical competencies, innovation mindset, and cross-domain integration capabilities.

References:

[1] *Yanmei Gao.(2026)High-Quality Development of Digital Economy under the Background of New Quality Productive Forces[J].China Management Informationization,29(02),130-132.*

[2] *Hongjie Dong,Lindong Su.(2025)Evolution Logic and Mechanism of New Quality Productive Forces in the Context of Digital Economy[J].Financial Management Research,12,5-15.*

[3] *Fahuai Wang,Jue Wang.(2025)Pathways for the Cultivation of E-commerce AIGC Application Talent in the Digital Economy Industry College under the Background of New Quality Productive Forces[J].China Storage&Transport,12,212-213.*

[4] *Yujing Xu.(2025)Strategies for Optimizing Logistics Cost Driven by New Quality Productive Forces in the Context of Digital Economy[J].Modern Business,20,123-126.*

[5] *Meizhe Song,Jiangyi Qi.(2025)Reform in Practice Teaching Models of Finance and Taxation in the Context of Digital Economy[J].Journal of Hunan Industry Polytechnic,25(05),98-103.*