

Research on the Integration Path of Project-Based Teaching and Ideological and Political Education in Curricula for New Business Studies in the Digital Intelligence Era

Chuxin Zhao, Deshui Chi*

Harbin Cambridge University, Harbin, 150001, China

*Corresponding author: zxcads2025@163.com

Abstract: Digital intelligence technology is reshaping business logic and the structure of competencies for New Business Studies talents, thereby presenting new challenges for the integration of value guidance and professional capabilities. This study focuses on the integration path of project-based teaching and ideological and political education in curricula within the context of the digital intelligence era. Starting from the logical foundation of value transformation, it analyzes the iteration of talent cultivation objectives, the expansion of the connotations of ideological and political education in curricula, and the theoretical basis for their coupling. This study constructs an endogenous ideological and political mechanism and a design framework for project-based teaching, encompassing principles for topic selection integration, pathways for implicit embedding, and indicators for evaluation. Furthermore, it explores three integration models enabled by digital intelligence technologies: dynamic allocation of ideological and political resources based on platforms, ideological and political interaction within virtual-real integrated scenarios, and data-driven dynamic feedback on effects. This study aims to reveal the inherent advantages of project-based teaching as a carrier for ideological and political education in curricula, providing a theoretical reference for the organic integration of professional education and value education in New Business Studies in the digital intelligence era.

Keywords: Digital Intelligence Era; New Business Studies; Project-Based Teaching; Ideological and Political Education in Curricula; Integration Path

Introduction

The clustered breakthroughs in digital intelligence technology are profoundly reshaping the operational patterns of business activities and the methods of value creation, thereby imposing requirements for the systematic restructuring of talent cultivation in New Business Studies. Traditional business education focuses on the transmission of functional knowledge and the acquisition of managerial skills. However, the data-driven and algorithmically decision-making characteristics of business activities in the digital intelligence era demand that talents possess cross-domain data insight capabilities, human-machine collaboration skills, and the ability to discern the boundaries of technological application. This evolution in competency structure points toward a compound literacy framework that enables individuals to harness technological tools while critically examining the consequences of their application. Correspondingly, the connotations of ideological and political education in curricula for New Business Studies also need to shift from the external implantation of values to an in-depth exploration of the inherent ethical dimensions within the professional knowledge system. Project-based teaching, with its typical characteristics of authentic contexts, problem-driven approaches, and inquiry-based processes, forms a theoretical compatibility with the intrinsic demands of ideological and political education in curricula, thereby offering a viable path for their integration. This study aims to explore the logical foundation, design framework, and technology-enabled models for the integration of project-based teaching and ideological and political education in curricula in New Business Studies within the digital intelligence era. It seeks to address the challenges of value guidance faced by business education against the backdrop of technological transformation, providing a theoretical reference for promoting the organic integration of professional education and value education.

1. The Value Orientation Shift of New Business Studies Education in the Digital Intelligence Era and the Logical Foundation for Ideological and Political Embedding

1.1 The Iteration of Talent Cultivation Objectives for New Business Studies Driven by Digital Intelligence Technology

The deep penetration of digital intelligence technology is reshaping the operational logic of business organizations and the methods of value creation, and this transformation imposes requirements for the systematic restructuring of the competency structure for talents in New Business Studies. Traditional business education focuses on the transmission of functional knowledge and the acquisition of managerial skills. However, the data-driven and algorithmically decision-making characteristics of business activities in the digital intelligence era demand that talents possess cross-domain data insight capabilities, human-machine collaboration skills, and the ability to discern the boundaries of technological application. The continuous innovation of business models and the increasingly blurred boundaries between industries further drive the shift of talent cultivation objectives from single-role competency to complex business problem-solving capabilities, evolving from a dominance of instrumental rationality toward an integration of technological literacy and business acumen. This iteration of the competency structure does not merely represent a simple addition of technological elements; rather, it points toward a compound literacy framework that enables individuals to harness technological tools while critically examining the consequences of their application, thereby laying the foundation for a profound reflection on the value orientation of business education^[1].

The evolution of talent cultivation objectives inevitably leads to a repositioning of the value dimension within the educational process. When technological means such as algorithmic recommendations, user profiling, and intelligent pricing become routine tools for business decision-making, talents must not only master technical operation methods but also develop a clear understanding of the ethical boundaries of technological application. This implies that New Business Studies education must, in the process of shaping students' data thinking and innovation capabilities, simultaneously cultivate their sensitivity to the social impact of business practices, enabling them to identify potential value conflicts while pursuing efficiency gains. This literacy structure, which balances technological proficiency with value judgment capabilities, constitutes the core characteristic of the iteration of talent cultivation objectives for New Business Studies in the digital intelligence era, and it also provides an intrinsic demand for the deep integration of ideological and political education in curricula with professional education.

1.2 The Expansion of Connotations and the Function of Value Guidance in Ideological and Political Education in Curricula for New Business Studies

Ideological and political education in curricula in the field of New Business Studies should not be simplistically understood as the external implantation of values; rather, it should be regarded as an in-depth exploration and systematic presentation of the inherent ethical dimensions within the professional knowledge system. The widespread application of digital intelligence technology in the business sector has given rise to a series of ethical issues endogenous to the business operation process, including issues concerning the definition of data ownership, issues of fairness in algorithmic decision-making, and issues of responsibility attribution in platform governance. These issues naturally constitute an integral part of the professional knowledge system in New Business Studies, rather than additional elements attached to the professional content. Therefore, the implementation of ideological and political education in curricula in New Business Studies education essentially entails a complete presentation of the value dimension within professional teaching content, enabling students to discern the trade-offs of interests and value choices underlying technological applications while mastering business analysis methods.

This expansion of connotations endows ideological and political education in curricula for New Business Studies with a unique function of value guidance, and its implementation path relies on deep embedding within the professional teaching process. The process guides students to examine the ethical implications of different decision-making paths during the analysis of business cases, inspires students to contemplate the inclusive attributes of innovative approaches during the deduction of business models, and cultivates students' critical awareness of algorithmic results during the practical sessions of data analysis. These teaching activities enable the development of value judgment capabilities to occur simultaneously with the enhancement of professional competencies. Value guidance is not indoctrination detached from professional content; rather, it allows learners to gradually internalize the

core concept of responsible innovation through the professional learning process itself, thereby forming an internal criterion that enables them to autonomously identify value conflicts and make reasonable trade-offs in future business practices.

1.3 The Theoretical Basis for the Coupling of Project-Based Teaching and Ideological and Political Education in Curricula

Project-based teaching, with its typical characteristics of authentic contexts, problem-driven approaches, and inquiry-based processes, forms a deep theoretical compatibility with the implementation requirements of ideological and political education in curricula for New Business Studies. From the perspective of teaching forms, project-based teaching situates the learning process within simulated or real business contexts, and the progression of project tasks inherently involves stages rich in value judgments, such as resource allocation, interest coordination, and risk assessment. This implies that the integration of ideological and political elements does not require deliberate arrangement; instead, it achieves natural penetration through the value tensions inherent in the project context itself. The integrity of a business project requires learners to consider the multifaceted impacts that a solution may trigger while focusing on its technical feasibility, and this process of consideration itself constitutes the concrete application of values within professional practice.

From the perspective of the intrinsic mechanisms of learning, project-based teaching emphasizes learners' active participation in collaborative inquiry, thereby providing a cognitive foundation for the deep construction of value identification. The formation of values is not a direct result of external indoctrination; rather, it is gradually constructed through processes of team interaction, the collision of viewpoints, and reflective adjustment. The decision-making dilemmas or conflicts of interest encountered during project advancement offer learners authentic scenarios in which to examine their own value stances and reflect on the perspectives of others. This value construction accomplished through embodied experience possesses a stronger cognitive foundation and emotional attachment compared to one-way reception. Consequently, it enables the substantive integration of professional competence cultivation and value formation at the level of the teaching process, providing a methodological support for the construction of ideological and political education in curricula that combines professional attributes with educational efficacy^[2].

2. The Endogenous Mechanism and Design Framework for Ideological and Political Elements in Project-Based Teaching

2.1 Principles for the Integrated Design of Project Topics and Ideological and Political Themes

Project topic selection serves as the logical starting point of project-based teaching, and its value orientation directly affects the depth and naturalness of the integration of ideological and political elements in the subsequent teaching process. The design of project topics needs to follow the principle of alignment between professional attributes and value connotations, which means that the business issues embedded in the project task should inherently contain exploitable value dimensions, rather than having moral education objectives forcibly attached to the professional content. Typical project topics in the field of New Business Studies in the digital intelligence era, such as the design of digital marketing solutions, innovation in platform business models, and the optimization of intelligent recommendation systems, naturally involve issues such as user privacy protection, data ethical boundaries, and algorithmic fairness considerations. These issues constitute unavoidable professional judgment links in the process of project advancement. The pre-identification and clear definition of these value dimensions at the topic selection stage lay the content foundation for the systematic embedding of subsequent ideological and political elements.

The realization of integrated design relies on the authenticity and complexity of the project context. Project tasks situated in real business contexts often face the dilemma of balancing multiple objectives and the need to coordinate diverse interests, and this complexity precisely provides an appropriate instructional space for value analysis. Project topic design should avoid simplified technical drill-type tasks and instead select challenging problems that prompt students to contemplate the relationship between business innovation and social impact. Through the context description section in the project task specification, relevant ethical issues are presented as integral components of the problem background, enabling students to develop a conscious awareness of the value dimension at the outset of the project and providing directional guidance for value inquiry throughout the entire project process.

2.2 Pathways for the Implicit Embedding of Ideological and Political Elements in the Project Process

The process design of project-based teaching offers diverse pathways for the implicit integration of ideological and political elements, with its core principle lying in embedding the cultivation of values into the natural stages of project advancement. In the team collaboration stage, the decomposition of project tasks and the allocation of responsibilities require students to confront practical issues of interest coordination and responsibility sharing, and this collaborative process itself constitutes an embodied experience of a sense of responsibility, the concept of fairness, and an attitude of inclusiveness. In the information collection and analysis stage, the screening of data source reliability, the assessment of the applicability of analytical methods, and the requirement for rigor in conclusion derivation all point toward the internal cultivation of academic ethics and professional integrity, thereby enabling the development of professional ethics to occur simultaneously with the acquisition of professional skills^[3].

The critical decision-making nodes in the project process constitute important opportunities for implicit integration. When a project team faces situations that require judgment, such as plan selection, resource allocation, or risk assessment, the teacher employs guiding questions rather than direct indoctrination to inspire students to contemplate the multifaceted impacts that different choices may bring. This guidance enables the consideration of the value dimension to become a natural component of the decision-making process, rather than an additional condition external to the selection of technical solutions. The project progress reporting and mid-term reflection stages also serve a function in value education. By requiring students to systematically articulate the difficulties encountered during project advancement and their approaches to addressing them, the process guides them to examine and reflect upon the value assumptions underlying their own decisions, thereby allowing the implicitly embedded ideological and political elements to achieve value internalization through students' active reflection.

2.3 Observational Indicators for the Ideological and Political Dimension in Project Outcome Evaluation

The construction of the project outcome evaluation system needs to transcend the traditional limitation of using technical feasibility or business logic as the primary criteria, incorporating the consideration of the value dimension into the professional evaluation framework. The establishment of observational indicators should focus on the identifiable value orientations and ethical consciousness within the project outcomes, rather than directly judging students' values. Specifically, observational points can be established from perspectives such as the degree to which the project plan considers the impact on multiple stakeholders, the identification of and response strategies for potential ethical risks, and the awareness of balancing resource utilization efficiency with social benefits. These observational indicators possess professional attributes and operability, enabling the integration of value dimension evaluation and professional competence evaluation within the same evaluation framework.

In the process of evaluation implementation, attention needs to be paid to the comprehensive utilization of process-oriented materials and outcome-oriented materials. The solution demonstration section, the decision-making basis explanation section, and the risk analysis section in the project report can all serve as textual bases for observing the ideological and political dimension. During the project defense session, students' responses to evaluators' questions, particularly the depth of thought and the basis for judgment demonstrated when addressing ethical dilemmas or value conflicts, also constitute important observational material. The evaluation subject should avoid making qualitative judgments about students' values; instead, it should form a professional description of the level of value consideration reflected in the project outcomes by assessing the achievement of specific indicator points. This observational approach, embedded within the professional evaluation framework, prevents the evaluation of the ideological and political dimension from becoming a mere formality while simultaneously conveying a clear signal to students that value judgment capability constitutes an important component of professional competence.

3. Integration Models of Project-Based Teaching and Ideological and Political Education in Curricula Enabled by Digital Intelligence Technology

3.1 The Dynamic Allocation Model of Ideological and Political Resources Based on Digital Intelligence Platforms

The construction of digital intelligence platforms provides technical support for the precise supply and dynamic allocation of ideological and political resources in project-based teaching. Under the traditional model, the presentation of ideological and political resources is relatively rigid, making it difficult to accommodate the differentiated demands for value-related materials across different project themes and at various stages of the teaching process. By establishing semantic associations between the ideological and political resource repository and the characteristics of project tasks, digital intelligence platforms enable resource delivery to be dynamically adjusted according to the project type, progress stage, and team needs. When a project enters the solution design phase, the platform can deliver ethical guidelines or industry standards relevant to that project domain; when a project involves data collection, the platform can present relevant cases on data privacy protection. This resource allocation approach, based on contextual needs, enables the integration of ideological and political elements to shift from being predetermined to being emergent^[4].

The dynamic nature of resource allocation is also reflected in the capture and reuse of generative resources emerging from the project process. The value-related confusions raised by students during project discussions, the ethical judgments formed in their decision-making analyses, and the shifts in perspectives expressed in their reflection reports can all be transformed into shareable teaching resources through platform tools. These generative resources possess the characteristics of contextual attachment and cognitive resonance, making them more likely to trigger deep thinking in learners compared to externally introduced standardized materials. Through the classification, annotation, and associated recommendation of these resources, the platform enables their recycling in subsequent project-based teaching, forming a positive cycle of resource accumulation and allocation optimization, thereby enhancing the targeting and effectiveness of the integration of ideological and political elements.

3.2 The Ideological and Political Interaction Model of Project-Based Teaching in Virtual-Real Integrated Scenarios

The virtual-real integrated scenarios constructed by digital intelligence technology create a new spatial form for deep ideological and political interaction in project-based teaching. Virtual simulation environments can recreate complex situations in business operations that are difficult to present in real classrooms, including the operating mechanisms of platform algorithms, the process of data transaction flows, and the game patterns among multiple stakeholders. Learners operate business models, adjust decision-making parameters, and observe the resulting changes in real time within virtual scenarios, and this method of interaction enables abstract business ethics issues to be presented intuitively. When students face the trade-off between efficiency improvement and fairness assurance in a virtual environment, their decision-making process itself constitutes embodied cognition of their own value orientations, providing vivid material for subsequent reflection.

The unique value of virtual-real integrated scenarios is also reflected in the interactive tension between the real project teams and the virtual contexts. Project groups in the physical classroom conduct discussions centered on the business cases presented in the virtual scenarios, and the online simulation results and offline discussion reflections mutually inform each other, thereby forming a multi-level ideological and political interaction network. In this process, teachers leverage digital intelligence tools to capture the discussion foci and judgment tendencies of each group in real time, providing timely guidance at key junctures. The problem contexts presented by the virtual scenarios evoke students' value-related confusions and cognitive conflicts, while the discussion spaces provided by offline interactions facilitate the clarification of these confusions and the resolution of these conflicts. This interactive cycle between the virtual and the real enables the construction of value concepts to be both contextually grounded and rationally supported^[5].

3.3 The Data-Driven Dynamic Feedback Model for the Effectiveness of Ideological and Political Integration

The data collection and analysis capabilities of digital intelligence technology provide

methodological support for the dynamic monitoring and feedback optimization of the effectiveness of ideological and political integration in project-based teaching. The multimodal data generated throughout the entire project-based teaching process, including discussion speech texts, decision-making record trajectories, reflection log content, and outcome presentation materials, can undergo feature extraction and pattern recognition through natural language processing and semantic network analysis techniques. The results of these data analyses can present the trajectory of learners' focus shifts during the project process, the trends in changes to their value judgment bases, and the depth evolution of their thinking on ethical issues, thereby forming a processual depiction of the effectiveness of ideological and political integration^[6].

The realization of the dynamic feedback model relies on a back-propagation mechanism that channels the results of data analysis into instructional design. The platform performs horizontal comparisons of data aggregated from multiple project-based classes, identifying the project types and embedding methods that yield more effective integration of ideological and political elements, thereby providing a basis for optimizing subsequent instructional design. Personalized feedback for specific project teams, on the other hand, helps teachers promptly grasp students' cognitive states regarding the value dimension and adjust the direction of their guidance strategies. The data analysis reveals not qualitative conclusions about students' values, but rather structured descriptions of their thought processes and focal characteristics, and these descriptions provide professional material for reflection by both teachers and students. The value of feedback lies not in making judgments but in initiating dialogue, enabling the optimization of the effectiveness of ideological and political integration to become a continuous iterative process based on data, rather than a periodic summary based on impressions.

Conclusion

This study systematically explores the integration path of project-based teaching and ideological and political education in curricula for New Business Studies in the digital intelligence era from three levels: the logical foundation of value transformation, the endogenous mechanism and design framework for ideological and political elements, and the integration models enabled by digital intelligence technology. The study reveals the iterative characteristics of talent cultivation objectives for New Business Studies driven by digital intelligence technology, clarifies the direction of expanding the connotations of ideological and political education in curricula from external implantation to in-depth exploration of professional ethical dimensions, and demonstrates the theoretical compatibility between project-based teaching and ideological and political education in curricula in terms of contextual features and learning mechanisms. At the level of integration mechanisms, the study constructs an overall framework encompassing the principles for integrated topic selection design, implicit embedding pathways, and evaluation observation indicators, enabling the integration of ideological and political elements to permeate the entire process of project-based teaching. At the level of technology enablement, the study proposes a dynamic allocation model for ideological and political resources based on digital intelligence platforms, an ideological and political interaction model in virtual-real integrated scenarios, and a data-driven dynamic feedback model for effectiveness, forming an operationalized expression of the integration path supported by technology. Subsequent research may further explore the differentiated characteristics of ideological and political integration in project-based teaching across different disciplinary fields, as well as the applicable boundaries of digital intelligence technology tools in value education, thereby promoting the deep integration of professional competence cultivation and value formation in New Business Studies education against the backdrop of technological transformation.

Fund Projects

“2024 Heilongjiang Province Higher Education Teaching Reform Research General Project, with the project title “Exploration of the Collaborative Education Practice of Ideological and Political Leadership and Project-Based Teaching in New Business Studies under the Background of Digital Intelligence Empowerment”, and the project approval number: SJGYB2024815.

References

[1] Liu, Qiong. *“Exploration of Project-Based Learning Method Adapting to Ideological and Political*

Education in Curricula in Higher Vocational Colleges.” *Knowledge Window (Teacher's Edition)*, no. 7 (2025): 6-8.

[2] Liu, Yanqiong, Yang Zheng, and Xu Zhixin. “Advancement of Ideological and Political Education in Curricula through Project-Driven Practical Teaching.” *Laboratory Science*, vol. 28, no. 2 (2025): 145-149+154.

[3] Wu, Min, et al. “Exploration of the Implementation Path for the ‘Dual Integration’ Teaching Reform of Specialization, Innovation, and Ideological and Political Education Based on Project-Oriented Teaching.” *Ability and Wisdom*, no. 10 (2025): 25-28.

[4] Duan, Jinying. “Research and Practice of Ideological and Political Education in Curricula Based on Project-Based Teaching Concepts.” *Journal of Hubei Open Vocational College*, vol. 37, no. 13 (2024): 100-101+107.

[5] Jiang, Zhe, Li Wenjing, and Liu Na. “Construction and Implementation of Project-Based Teaching System for Ideological and Political Courses in Higher Vocational Colleges.” *Modern Business Trade Industry*, vol. 45, no. 11 (2024): 234-236.

[6] Chang, Xiangrong, Chen Junying, and Li Yuanbo. “Construction and Exploration of Ideological and Political Education in Curricula Based on Project-Driven Teaching.” *China Modern Educational Equipment*, no. 15 (2023): 107-110.