

Exploring Reform Pathways for Fulfilling the Mission of Higher Education in the New Era

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Abstract: As socialism with Chinese characteristics enters a new era, national development has endowed higher education with the strategic mission of cultivating talents for the new era. This paper firstly elucidates the profound connotations of the “new era” and the strategic shift in the mission of higher education. It then systematically analyzes the practical dilemmas encountered in its implementation, such as “emphasizing knowledge over ability”, “disciplinary barriers”, “disconnect between education and industry”, and “singular evaluation criteria”. In response to these challenges, the core focus of this paper is to explore systematic reform pathways. It constructs a “Five-in-One” reform model grounded in “Fostering Virtue through Education”, and further concretizes the implementation of these pathways through specific designs such as the “Interdisciplinary PBL Project Chain” and the “Digital Career Development Platform”. The aim is to provide a feasible theoretical framework and practical guidance for promoting the connotative development of China’s higher education and building a strong higher education system.

Keywords: New Era, Mission of Higher Education, Practical Dilemmas, Reform Pathways, Five-in-One Model.

1. Introduction

The 19th National Congress of the Communist Party of China declared that socialism with Chinese characteristics had entered a “new era”, establishing the grand blueprint for comprehensively building a modern socialist country.[1]The report of the 20th National Congress further explicitly stated: “Education, science and technology, and human resources are the foundational and strategic pillars for building a modern socialist country in all respects.”[2]This significant assertion elevates the status and role of higher education to an unprecedented strategic height. This implies that higher education in the new era is no longer merely a place for transmitting knowledge and training professionals; it is a core driver of technological innovation, a supporter of national strategies, and a leader of social development. Its core mission has transformed into cultivating innovative talents for the new era who possess both moral integrity and professional competence, capable of shouldering the great task of national rejuvenation.

However, a significant gap exists between this grand mission and the complex reality of education. Traditional talent cultivation models reveal numerous shortcomings when confronting this strategic shift: teaching models struggle to break free from the path dependency of “emphasizing knowledge transmission over ability cultivation”; rigid disciplinary and professional structures hinder the development of interdisciplinary and innovative talents; a structural misalignment exists between talent cultivation and socio-economic development needs; and utilitarian evaluation orientations impede students’ holistic development and personal growth. These practical dilemmas have become bottlenecks constraining the fulfillment of higher education's mission in the new era.

Therefore, systematically interpreting the new connotations of the higher education mission in the new era, deeply analyzing its practical challenges, and constructing a set of scientific, systematic, and feasible reform pathways

based on this analysis have become issues of great theoretical value and practical urgency. To address this, this paper firstly clarifies the profound transformation of the higher education mission in the context of the new era; secondly, diagnoses the core practical dilemmas in its current implementation; thirdly, places the research focus on exploring systematic reform pathways, constructing a “Five-in-One” reform framework; fourthly, discusses the feasibility of implementing these pathways through specific practical scheme designs; and finally, presents conclusions and prospects.

2. Profound Transformation of the Higher Education Mission in the New Era

2.1. Connotations of the “New Era” and New Requirements for Education

The “new era” here is not merely a temporal marker but signifies a new historical direction for China’s development. Its core connotation lies in the transformation of the principal contradiction in society into that “between unbalanced and inadequate development and the people’s ever-growing needs for a better life”. When projected into the field of education, this is specifically reflected in the increasingly prominent contradiction between the people’s need for high-quality, equitable, and diverse higher education and the unbalanced and inadequate development of higher education itself.

Against this backdrop, the state has placed unprecedented strategic demands on higher education.[3]It is no longer an isolated social subsystem but, together with “science and technology” and “human resources”, constitutes a “foundational and strategic pillar” supporting national modernization. This means that higher education must break out of the traditional “ivory tower”, integrate more deeply into the national innovation system, more proactively respond to the strategic needs of economic and social development, and become a primary force driving knowledge innovation,

leading social progress, and enhancing national core competitiveness.

2.2. Shift in the Mission of Higher Education

The new era summons a new mission. The traditional mission of higher education focused on cultivating “standardized talents” with specific professional knowledge, which can be summarized as “professional education”. In the new era, its mission has undergone a strategic shift, with the core now being to cultivate innovative talents for the new era who possess both moral integrity and professional competence, capable of shouldering the great task of national rejuvenation. This essentially represents a paradigm of “holistic education”. [4]

This transformation is mainly manifested in three dimensions:

In terms of objective, the educational goal has shifted from cultivating specialists in a particular field to cultivating well-rounded individuals with sound character, noble morality, social responsibility, humanistic sentiment, and an innovative spirit.

In terms of content, students are required not only to possess profound professional knowledge but also to have broad interdisciplinary perspectives and the systemic thinking ability to solve complex problems.

In terms of mode, the core of teaching has shifted from teachers transmitting known knowledge to students, towards creating environments for students to actively explore the unknown, construct knowledge, and develop abilities.

3. Analysis of Practical Dilemmas in Fulfilling the Higher Education Mission

Although the objectives are clear, current practices in higher education remain deeply mired in the path dependency of traditional models, facing four core dilemmas.

3.1. Dilemma of Knowledge Integration

The excessively fine division of disciplines and majors in higher education artificially fragments the integrity of knowledge. This confines students to narrow professional fields, making it difficult for them to form a holistic understanding of the complex world, akin to “blind men touching an elephant”. [5]When faced with real-world problems requiring comprehensive application of multidisciplinary knowledge, this fragmented knowledge structure proves inadequate, exposing students’ lack of systemic thinking.

3.2. Dilemma of Capacity Building

Current higher education classrooms often remain teacher-centered and textbook-oriented, with teaching models largely characterized by “cramming” knowledge transmission. Students’ mastery of knowledge stays at the level of memory and understanding, while training in higher-order thinking skills such as analysis, evaluation, and creation is severely lacking. [6]The result is that while graduates possess rich

knowledge reserves, they lack the innovative ability, self-directed learning capability, and critical thinking necessary to transform knowledge into solutions for practical problems, making it difficult for them to adapt to a rapidly changing modern society.

3.3. Dilemma of Social Adaptation

The updating of talent cultivation programs in higher education institutions is slow, creating a noticeable “time lag” and “content gap” with industrial technological iteration and market talent demands. The “integration of industry and education” strategies proposed by many institutions often remain merely at the agreement level in practice, with partner enterprises failing to participate deeply in the entire talent cultivation process. This leads to a significant structural mismatch between the knowledge structure, skill level, and professional literacy of the talents cultivated by universities and the actual needs of employers. Consequently, graduates often require lengthy retraining by enterprises to become competent in their positions.[7]

3.4. Dilemma of Value Orientation

The utilitarian evaluation orientation in higher education, centered on employment rates, postgraduate admission rates, grades, and publication quantities, distorts the essence of education. When students study primarily for “high scores” and “good jobs”, instrumental rationality overrides value rationality. [8]Students’ personal development, interest exploration, spiritual growth, and long-term self-realization are severely neglected under singular evaluation indicators, leading to the alienating phenomenon of “having employment, but lacking education”.

4. Exploration of Systematic Reform Pathways for Fulfilling the Higher Education Mission

To systematically address the dilemmas in fulfilling the higher education mission, this paper constructs a “Five-in-One” teaching reform system model, based on the fundamental task of “Fostering Virtue through Education” and guided by core socialist values.

This model aims to transcend the piecemeal, localized reforms of the past. It emphasizes the reconstruction of teaching objectives as the logical starting point, defining the new direction for talent cultivation; the innovation of teaching models as the core engine, directly challenging the malpractice of “emphasizing knowledge over ability”; the integration of knowledge systems as the content support, breaking down disciplinary barriers and providing students with an integrated knowledge framework; the deepening of industry-education collaboration as the external driver, embedding social needs deeply into the entire educational process to resolve the supply-demand mismatch; and the improvement of the evaluation mechanism as the feedback regulator, guiding and ensuring the entire system operates healthily towards the goal of “holistic education”, as shown in Figure 1.

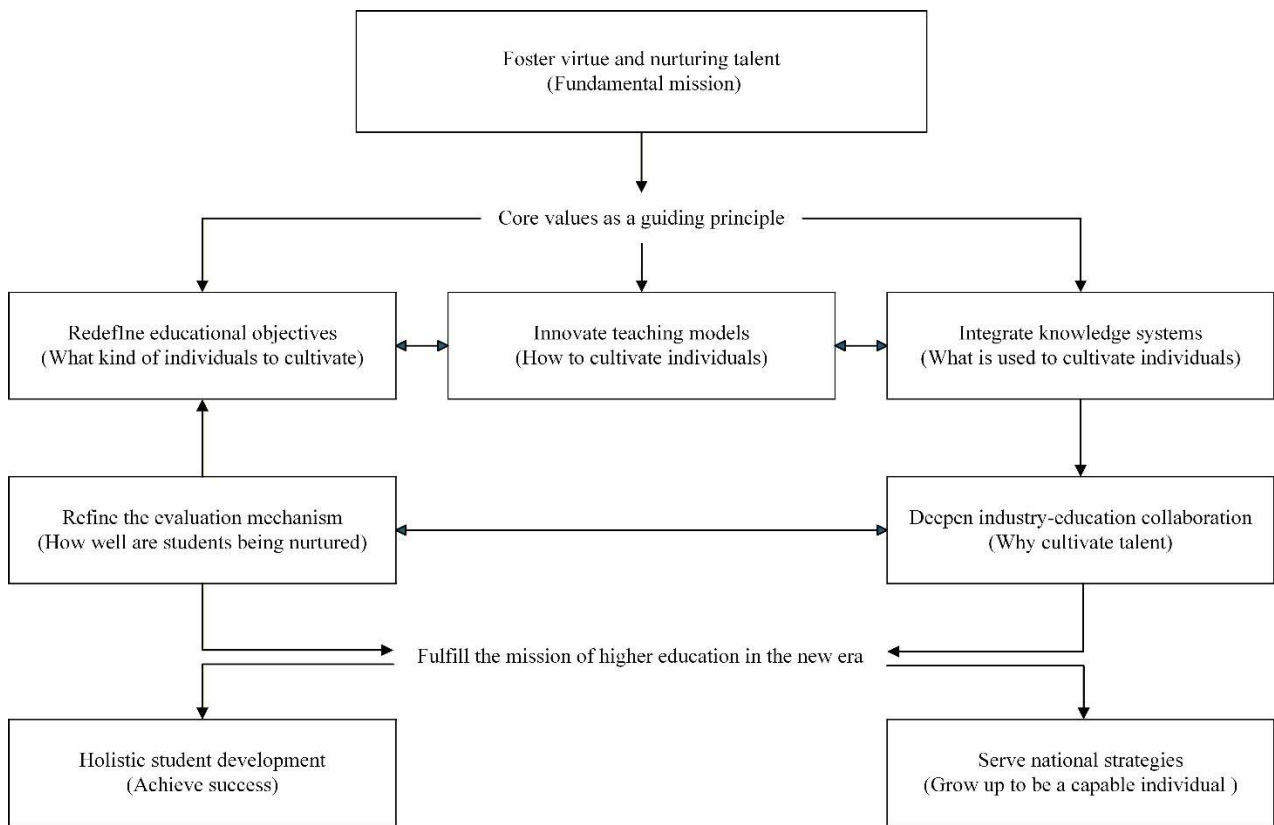


Fig. 1 “Five-in-One” Teaching Reform System Model

4.1. Reconstruct Teaching Objectives

(1) Core Concept: The goal of education should shift from transmitting known knowledge to cultivating the ability to explore the unknown and create new knowledge.

(2) Specific Pathways: At the top-level design stage, higher education institutions need to explicitly incorporate core competencies such as critical thinking, complex problem-solving ability, innovation and creativity, digital literacy, teamwork, and lifelong learning ability into the talent cultivation programs of all majors. These competencies should serve as the overarching goals for curriculum design, teaching implementation, and learning assessment.

4.2. Innovate Teaching Models

(1) Core Concept: Promote the shift of the classroom from the teacher’s “lecture hall” to the student’s “learning field” and “inquiry field”.

(2) Specific Pathways: Comprehensively introduce PBL, systematically designing interdisciplinary project-based learning grounded in authentic, complex problems, allowing students to “learn by doing”. Deepen blended learning, utilizing online platforms and smart classrooms to implement flipped classrooms, dedicating class time to higher-order thinking training and deep interaction. [9]Strengthen innovation and entrepreneurship practice, integrating competitions, incubators, and maker spaces into the curriculum system, allowing students to hone their innovative spirit through trial, error, and iteration.

4.3. Integrate Knowledge Systems

(1) Core Concept: Break down disciplinary and professional barriers, cultivating students’ ability to integrate knowledge structures and think systemically.

(2) Specific Pathways: Develop core general education curricula, establishing modular course clusters in classical reading, history of science and technology, arts, and ethics to

solidify students’ common knowledge base and value foundation. Establish interdisciplinary degree programs, experimenting with creating interdisciplinary degree programs or micro-programs in areas like “Digital Humanities” or “Smart Energy”, providing students with structured interdisciplinary learning paths. Integrate research training throughout the undergraduate program, frontloading and embedding components like literature review, research project design, and academic writing into the entire undergraduate journey.

4.4. Deepen Industry-Education Collaboration

(1) Core Concept: Treat industrial development needs as a crucial input for talent cultivation, achieving organic connection between the education chain, talent chain, industrial chain, and innovation chain.

(2) Specific Pathways: Co-establish modern industry colleges with leading enterprises in relevant sectors, jointly developing cultivation standards, designing courses, forming teaching teams, and building practice bases. Establish a “revolving door” mechanism, encouraging faculty to take temporary positions in enterprises and inviting industry experts to serve as adjunct professors, building a “dual-qualified” teaching team. [10]Leverage university science parks, encouraging teachers and students to apply research outcomes to practical industrial scenarios, serving regional economic upgrading, and strengthening the transformation of results.

4.5. Improve the Evaluation Mechanism

(1) Core Concept: Move beyond the “Five-Only” tendency, establishing a multi-dimensional, process-oriented, developmental comprehensive evaluation system.

(2) Specific Pathways: Reform student evaluation by introducing diverse assessment methods such as project reports, team performance, social practice, and innovation outcomes, and establishing a “digital portrait” style growth

record that tracks moral, intellectual, physical, aesthetic, and labor education development. Reform teacher evaluation by increasing the weight given to teaching commitment, teaching reform achievements, and student guidance effectiveness in professional title reviews and performance assessments. Reform institutional evaluation by guiding universities to base their development on their unique characteristics, focusing on enhancing educational quality and long-term social contribution.

These five pathways are not simply parallel but constitute an interdependent, dynamically coupled organic whole: the innovation of teaching objectives requires supporting reforms in teaching models and knowledge systems, while industry-education collaboration provides authentic application scenarios and demand traction for the first three. The evaluation mechanism runs throughout, providing continuous feedback and motivation for all components.

5. Practical Exploration of Reform Pathways

To ensure the operability of the reform pathways, this paper designs two representative practical schemes.

5.1. Case 1: Designing an Interdisciplinary PBL Project Chain on “Smart City and Social Governance”

This case aims to address both the “Capacity Building” and

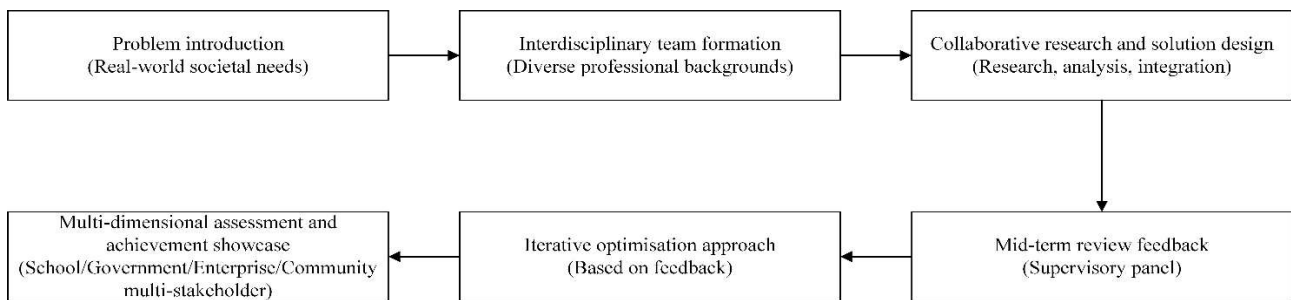


Fig. 2 Implementation Flowchart of the “Interdisciplinary PBL Project Chain”

5.2. Case 2: Construction of an Integrated Student Career Development Support Platform

This case aims to address the “Value Orientation” and “Social Adaptation” dilemmas.

(1) Design Objective: Provide students with personalized career development and growth support, balancing their career preparation and self-realization.

(2) Platform Architecture:

The platform can consist of the following parts: ①Digital Profile System: Integrate data on academics, skills, projects, volunteer activities, etc., to form a dynamic electronic student portfolio. ② Intelligent Matching Engine: Recommend

“Knowledge Integration” dilemmas.

(1) Design Objective: Cultivate students' comprehensive ability to solve complex urban system problems.

(2) Implementation Process: ①Problem Introduction: A real need is posed by local government or community, e.g., “Digital renovation of old residential districts and enhancement of community cohesion.” ②Team Formation: Students form interdisciplinary teams comprising majors like management, computer science, sociology, environmental engineering, etc. ③Collaborative Research: Teams conduct field research, data collection, technology selection, and social analysis to form comprehensive solutions. [11] ④Mid-term Review: Engage mentors both within and outside the institution to evaluate the proposed solutions, and provide timely feedback to the team on the review outcomes. ⑤ Iterative Optimization: Solutions are iteratively refined based on feedback from internal and external mentors. ⑥Multi-dimensional Evaluation: Final outcomes are presented to a diverse panel of representatives from the university, government, industry, and community for defense, evaluated across multiple dimensions including innovation, feasibility, integration, and social value, as shown in Figure 2.

internships, competitions, courses, etc., to students precisely based on their profiles. [12] ③Mentor Network: Integrate resources from academic advisors, career counselors, enterprise HR, and outstanding alumni, striving to provide students with online and offline one-on-one career planning guidance. ④ Growth Community: Support students in forming online communities based on career goals, facilitating peer support and information sharing.

5.3. Support System

The success of reform relies on systematic support, the core of which is promoting paradigm shifts in key areas, as shown in Table 1.

Table 1. Key Paradigm Shifts Supporting Reform Implementation

Key Areas	Traditional Paradigm	Reform Paradigm	Key Measures
Teacher Development	Research takes precedence, teaching is marginalized	Academic orientation in teaching, integration of science and education	Establish a Centre for Teaching Development, incorporating teaching reform achievements and teaching awards as core criteria for academic title evaluation.
Student Management	Rigid academic system, standardized pathway	Fully credit-based system, flexible learning	Expand course and program choice, introduce “Innovation Credits”, and recognize achievements gained through extracurricular learning.
Resource Allocation	Allocation by subject and number of students	Performance and reform: dual drivers	Constitute a dedicated fund for educational reform, with resources prioritized to interdisciplinary projects, industry-academia integration programmers, and teaching innovation teams.

6. Summary

This paper systematically elaborates on the strategic shift of the higher education mission in the new era from “professional education” to “holistic education” and deeply analyzes the four core practical dilemmas encountered in its implementation. As the research focus, it constructs a “Five-in-One” systematic reform model grounded in “Fostering Virtue through Education”, proposing interconnected reform pathways from the five dimensions of teaching objectives, teaching models, knowledge systems, industry-education collaboration, and evaluation mechanisms. Through two comprehensive practical cases and supporting safeguard mechanisms, it demonstrates the feasibility of implementing these pathways, providing a clear theoretical framework and practical reference for universities to advance teaching reform.

However, this study primarily conducts theoretical construction and scheme design at the macro and meso levels. The effectiveness and universality of the proposed pathways and cases still require verification and adjustment through diversified and concrete practices in various higher education institutions. Furthermore, while the research touches upon external factors such as the broader policy environment, regional economic differences, and socio-cultural atmosphere, its exploration of their influence remains limited due to the focus on internal institutional reform design.

Looking forward, higher education reform should continue to deepen in the following aspects: Firstly, further strengthen the implementation mechanism for “Fostering Virtue through Education”, organically integrating value shaping into all curricula and practices. Secondly, actively embrace digital and intelligent technologies, leveraging artificial intelligence and big data to empower personalized learning and educational governance. Thirdly, build a more flexible and open lifelong education system, breaking down temporal and spatial barriers to learning. Fourthly, amidst globalization, strengthen cultural confidence, deepen international exchange and cooperation in higher education, and contribute Chinese wisdom. Only by adhering to systemic thinking and daring to innovate can China’s higher education live up to the mission of the new era and lay a solid talent foundation for the great rejuvenation of the Chinese nation.

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