

RESEARCH ON THE DEVELOPMENT AND OPTIMIZATION OF MANAGEMENT STRATEGIES FOR ENHANCING THE TRANSFORMATIONAL LEADERSHIP OF DEANS OF SECONDARY COLLEGES IN HIGHER VOCATIONAL COLLEGES

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Abstract

Against the backdrop of concurrent modernization of vocational education governance and digital transformation, governance effectiveness in higher vocational institutions increasingly depends on the transformational leadership of secondary-college deans. Using Honghe Vocational and Technical College as a case, this study adopts a sequential explanatory mixed-methods design. First, a questionnaire survey was conducted to diagnose cadre management (morality, competence, diligence, performance, and integrity) and the nine-dimensional leadership of secondary-college deans (integrating the Five-Forces leadership model with the four dimensions of transformational leadership). Subsequently, semi-structured interviews and focus groups were conducted to interpret and contextualize key statistical findings. Based on these results, a strategy system for enhancing deans' leadership was developed and refined, and the indicator system was further improved through an expert consensus procedure. The findings revealed a structural pattern in cadre management characterized by stronger morality and integrity but relatively weaker competence and performance. Similarly, deans' leadership showed prominent moral exemplarity alongside deficiencies in strategic foresight and individualized support. Based on the diagnostic evidence, this study proposes an integrated improvement scheme covering "Vision–Mission–Objectives–Strategies–Projects/Activities–KPIs," and establishes a replicable closed-loop pathway of "diagnosis–development–optimization–evaluation," providing higher vocational institutions with actionable governance tools and a practice-oriented model for middle-level leadership development.

Keywords : Higher Vocational Colleges, Dean of Secondary College, Transformational leadership, Management Strategy

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Introduction

Against the backdrop of concurrent global industrial digitalization, green transformation, and heightened uncertainty, systems for cultivating technical and skilled talent are undergoing structural reshaping. Many countries regard Technical and Vocational Education and Training (TVET) as a key institutional arrangement for economic transformation, workforce reskilling, and social inclusion. The UNESCO-UNEVOC TVET Strategy 2022–2029 emphasizes that institutional governance capacity and leadership development constitute critical driving forces for achieving digital and sustainable transformation, with middle-level leaders playing increasingly prominent roles in policy implementation, quality assurance, and organizational innovation (UNESCO-UNEVOC. 2022).

Within the Chinese context, the National Vocational Education Reform Implementation Plan formally proposed the modernization of governance systems and governance capacity, and strengthened internal governance structures in Colleges through initiatives such as the "Double High Plan" and industry–education integration (State Council of the People's Republic of China. 2019). Secondary Colleges have gradually become key operational units in advancing reforms and delivering performance outcomes, and the development quality of higher vocational Colleges largely depends on the strategic execution and institutional implementation capacity of middle-level management teams (Ren, & Ren. 2025). Among them, Deans of Secondary Colleges assume responsibilities including strategic alignment, resource coordination, and organizational mobilization, serving as critical hubs linking institutional design, implementation, and performance feedback. However, during processes such as digital transformation, specialty cluster development, and quality governance, issues including implementation deviation, insufficient coordination, weakened incentives, and delayed feedback frequently emerge at the level of middle-level governance within Secondary Colleges.

Although existing studies have confirmed significant relationships between transformational leadership and teacher performance, organizational commitment, and reform effectiveness (Kasalak, & Dağyar. 2022), several limitations remain. Research has largely focused on institutional or macro-level perspectives, with insufficient systematic attention to the key middle-level position of Dean of Secondary College. Many studies remain at the level of explaining outcomes, lacking pathway construction from diagnosis to strategy development. Moreover, existing recommendations are often fragmented and lack implementable and evaluable strategic systems. Particularly in the governance context of higher vocational Colleges, Deans of Secondary Colleges must address complex and integrated tasks, including value leadership (morality), institutional execution and process control (competence/control), strategic planning and decision-making (foresight/decision), and humanistic care (individualized support). A single theoretical framework is therefore insufficient to comprehensively explain the multidimensional demands of their governance practice.

Accordingly, this study introduces the five-dimensional cadre management evaluation system (morality, competence, diligence, performance, and integrity) as the baseline of organizational governance. It integrates the Five-Forces leadership model (foresight, inspiration, influence, decision-making, and control)

with the four dimensions of transformational leadership (moral exemplarity, leadership charisma, vision motivation, and individualized support) to construct a nine-dimensional leadership profile of Deans of Secondary Colleges. This framework is used to explain the coupling relationships among institutions, capability, performance, and care, and to provide a basis for strategy development and optimization. In terms of research design, this study takes Honghe Vocational and Technical College as a case and adopts a sequential explanatory mixed-methods approach: quantitative surveys are first used to identify governance and leadership characteristics, followed by qualitative data to interpret and contextualize key findings, upon which strategy development and validation are conducted. Guided by this framework, the study addresses two central questions: What are the demand structure and deficiency characteristics of the nine-dimensional leadership of Deans of Secondary Colleges? How can a leadership enhancement strategy system that is implementable, evaluable, and iteratively optimizable be constructed based on diagnostic results derived from the "five-dimensional governance–nine-dimensional profile" framework?

Research Objectives

1. To conduct contextual diagnosis through the integrated application of the 7S framework and PESTEL analysis, and, in combination with tools such as SWOT/TOWS, VMOST, and SMART, to construct a strategy system for enhancing the transformational leadership of Deans of Secondary Colleges in higher vocational Colleges.
2. To refine the structural design of the proposed strategies and achieve consensus validation through focus groups and the Delphi method, thereby forming a scientifically grounded and feasible management framework.
3. To ultimately develop an integrated scheme covering "Vision–Mission–Objectives–Strategies–Projects/Activities–KPIs," providing a replicable practice-oriented model for middle-level leadership development in higher vocational Colleges.

Literature Review

1. The "Morality–Competence–Diligence–Performance–Integrity" Evaluation System and Governance of Cadres in Higher Vocational Colleges

The framework of "morality, competence, diligence, performance, and integrity" originates from the Regulations on the Assessment of Party and Government Leading Cadres, which evaluates cadres' overall quality across five dimensions: political morality, professional competence, work attitude, performance outcomes, and integrity in self-discipline (The General Office of the CPC Central Committee. 2019). In the governance of higher vocational Colleges, this framework aligns with political and regulatory requirements and provides a quantifiable baseline for balancing institutional compliance and performance orientation in middle-level positions (Han. 2022; Li, H. 2020). International research likewise emphasizes that multidimensional performance evaluation contributes to enhancing transparency, accountability, and ethical governance in education systems (Marinaccio. 2019). However, existing studies have largely applied

this framework for evaluation and accountability purposes, with limited attention to linking "five-dimensional governance outcomes" with leadership competency structures and improvement-oriented strategy and indicator systems. Therefore, it is necessary to connect five-dimensional governance outcomes with middle-level leadership profiles to support strategy generation and improvement evaluation.

2. Development of Transformational Leadership Theory and Its Significance for Educational Governance

Transformational leadership emphasizes vision motivation, value leadership, and individualized consideration (Burns, 1978; Bass & Riggio, 2006), and has been shown to be significantly associated with teacher performance, organizational commitment, and reform effectiveness (Kasalak, & Dağyar. 2022; Yu, & Xiang. 2025). In the Chinese context, Li, & Shi (2005, 2008) developed the Transformational Leadership Questionnaire (TLQ), highlighting moral exemplarity, leadership charisma, visionary motivation, and individualized consideration, which better align with the governance logic of educational organizations emphasizing moral influence. Nevertheless, existing studies largely remain at the level of outcome explanation, with relatively limited research on contextualized mechanisms for middle-level positions such as Deans of Secondary Colleges, as well as insufficient exploration of pathways translating diagnosis into strategy. In addition, coverage of "hard governance" dimensions, such as institutional execution and process control, remains limited.

3. Institutional Execution and Strategic Governance Advantages of the Five-Forces Leadership Model

The Five-Forces leadership model proposed by the Research Group on Scientific and Technological Leadership, Chinese Academy of Sciences (2006)—including foresight, inspirational power, influence, decisiveness, and control—more effectively explains competency requirements related to institutional execution, resource coordination, quality monitoring, and risk control in middle-level governance roles. Integrating the Five-Forces model with transformational leadership enables the construction of a "soft-hard" integrated leadership framework, providing a more comprehensive depiction of the composite capability structure required of Deans of Secondary Colleges in balancing value leadership and institutional execution. However, the role-based adaptation and empirical validation of the Five-Forces model within educational contexts still require further investigation.

4. Methodological Roles of Strategic Management Tools in Educational Governance

The primary function of strategic tools lies in supporting a closed-loop process of evidence-based diagnosis, strategy generation, and implementation evaluation. SWOT/TOWS analysis facilitates the transformation of internal and external factors into strategic combinations (Wehrich. 1982); the 7S framework and PESTEL analysis help identify organizational and environmental constraints (Aguilar. 1967); VMOST and SMART support goal decomposition and measurability; and focus groups together with the Delphi method enable consensus validation and indicator optimization (Habibi, et al. 2014). However, in existing studies, such toolchains often remain at the level of macro-level planning and are rarely aligned consistently with middle-level leadership competency diagnosis and KPI system construction.

5. Theoretical Integration and Research Entry Point

Current research on middle-level leadership in higher vocational Colleges commonly suffers from theoretical fragmentation and insufficient practical applicability of strategies. To address this gap, this study adopts the "morality–competence–diligence–performance–integrity" framework as a governance baseline diagnosis, integrates the Five-Forces model with the TLQ framework to construct a nine-dimensional leadership profile for middle-level competency diagnosis, and introduces strategic analysis and goal-decomposition methods to translate diagnostic evidence into executable strategies and evaluable KPI systems. In doing so, the study establishes a closed-loop pathway of "diagnosis–development–optimization–evaluation," providing a replicable governance solution for enhancing the leadership of Deans of Secondary Colleges. This approach responds to the critical gap in higher vocational middle-level leadership research characterized by insufficient theoretical integration and limited evaluability of strategic outcomes.

Research Methodology

1. Research Design

This study adopts a sequential explanatory mixed-methods design (QUAN → QUAL), aiming to construct and optimize a strategy pathway for enhancing the transformational leadership of Deans of Secondary Colleges in higher vocational Colleges through interpretive integration of quantitative and qualitative data. This design emphasizes first developing an overall profile through quantitative investigation to identify key deficiencies and influencing factors, followed by qualitative inquiry to interpret, supplement, and contextualize key statistical findings. Ultimately, the integration of quantitative evidence and qualitative mechanism-based explanations is translated into executable and evaluable strategies and an indicator system.

The research was conducted in three stages. In the first stage, based on the "morality, competence, diligence, performance, and integrity" framework proposed in the Regulations on the Assessment of Party and Government Leading Cadres, questionnaires and interviews were used to systematically identify strengths, deficiencies, and institutional implementation deviations in cadre management, thereby establishing a baseline diagnosis of organizational governance. In the second stage, focusing on the current status and needs of Deans of Secondary Colleges, a nine-dimensional leadership assessment system was constructed by integrating the Five-Forces leadership model (Research Group on Scientific and Technological Leadership, Chinese Academy of Sciences. 2006) with the four dimensions of transformational leadership (Li, & Shi. 2005). Descriptive statistics, correlation analysis, and regression analysis were applied to identify key deficiency dimensions and influencing factors. Subsequently, semi-structured interviews and focus groups were conducted to interpret and contextualize the key statistical results, revealing institutional and contextual mechanisms underlying low-scoring dimensions. The third stage focused on strategy construction and optimization. Drawing on evidence from the first two stages, a preliminary strategy framework was developed and systematically refined through a structured "toolchain" approach: SWOT/TOWS analysis was used to generate strategic directions; the 7S framework and PESTEL

analysis were employed to align strategies with organizational and external environmental constraints; VMOST and SMART were used to decompose strategies into objectives and projects (activities); and focus groups together with the Delphi method were applied to achieve consensus validation and iterative optimization of strategies and the KPI system, ensuring scientific rigor, operational feasibility, and contextual adaptability.

2. Research Participants and Sample

The research participants consisted primarily of Deans of Secondary Colleges at Honghe Vocational and Technical College, supplemented by multiple stakeholder groups, including institutional leaders, middle-level administrators, teachers, and enterprise representatives, to enhance representativeness and reliability. The study combined stratified sampling and purposive sampling. In the quantitative phase, stratified sampling was employed to ensure coverage across different organizational roles, thereby improving representativeness and reducing structural bias. In the qualitative phase, purposive sampling was used to select participants with critical experience, enabling mechanism-based explanations of statistical findings and achieving explanatory saturation. It should be noted that the first stage focused on baseline diagnosis of internal governance and institutional execution; therefore, participants were limited to institutional leaders, middle-level administrators, and teachers, while enterprise representatives were mainly involved in the second stage to provide external collaboration perspectives in leadership demand diagnosis.

Sample collection was conducted in three stages. In the first stage (baseline diagnosis of cadre management), the population size was $N = 367$ (institutional leaders, middle-level administrators, and teachers), from which 135 valid questionnaires were obtained, along with interviews conducted with 12 participants, including institutional leaders, middle-level administrators, and key teachers. Given that the purpose of this stage was exploratory diagnosis—identifying governance strengths and deficiencies, generating key issues, and informing subsequent interviews and strategy development—the sample size met the statistical requirements for exploratory diagnostic research (approximately $\pm 7\%$ estimation error at a 95% confidence level), with findings primarily serving baseline judgment and problem identification.

In the second stage (leadership demand diagnosis of Deans of Secondary Colleges), the population size was $N = 793$ (including institutional leaders, middle-level administrators, teachers, and enterprise representatives), yielding 419 valid questionnaires. Additionally, 20 participants—including institutional leaders, functional department administrators, Secondary College administrators, teachers, and enterprise representatives—were interviewed to develop a multi-stakeholder and comprehensive leadership demand profile and contextual interpretation.

In the third stage (strategy development and optimization), a 10-member team composed of institutional leaders, functional department administrators, and Secondary College administrators participated in brainstorming sessions, focus group discussions, and Delphi consultations to ensure that the strategy system incorporated both practical experience and expert consensus.

Regarding sample size adequacy, the second-stage survey population was $N = 793$. Following Cochran's (1977) sample size estimation approach, under a 95% confidence level ($Z = 1.96$), allowable error

$e = 0.05$, and a conservative assumption of $p = 0.5$, with finite population correction applied, the required minimum sample size was approximately 259. The valid sample size of 419 in this study substantially exceeded this threshold, satisfying requirements for estimation precision and statistical robustness in social science research. Furthermore, according to Comrey and Lee's (1992) empirical classification of sample adequacy for factor analysis, $N = 419$ falls within the "good to very good" range, supporting the robustness of structural validity testing as well as correlation and regression analyses.

3. Data Collection and Analysis Methods

3.1 Data Collection

Data collection in this study consisted of three methods: questionnaires, interviews, and expert consultation. The questionnaire component included a cadre management status survey and a leadership demand survey for Deans of Secondary Colleges, both employing five-point Likert scales. The former was constructed based on the five dimensions of morality, competence, diligence, performance, and integrity, while the latter was developed according to the nine-dimensional framework integrating the Five-Forces leadership model with the four dimensions of transformational leadership. Both questionnaires underwent literature review, expert evaluation, and pilot testing to ensure content validity. The interview component was designed based on key issues identified from questionnaire results. Semi-structured interview protocols were developed, and thematic analysis was applied to code and categorize qualitative data, thereby deepening and explaining quantitative findings. During the strategy development stage, brainstorming sessions were first conducted to generate an initial strategy draft, followed by focus group discussions to obtain revision suggestions. Subsequently, two rounds of Delphi expert consultation were implemented to achieve consensus and final convergence of management strategies.

3.2 Data Analysis

techniques and research objectives. The quantitative analysis was conducted using SPSS 29.0, including descriptive statistics, correlation analysis, and regression analysis to identify key relationships and influencing factors between the five dimensions of cadre management and the nine dimensions of deans' leadership. Reliability was assessed using Cronbach's α to examine internal consistency. To evaluate structural suitability and factorability, the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test of sphericity were applied, providing preliminary evidence of construct validity. Given that the primary focus of this study lies in quantitative-qualitative interpretive integration and strategy system construction, more stringent construct validation procedures such as confirmatory factor analysis (CFA) were not conducted. Future studies will further examine and strengthen structural validity and model robustness through CFA and structural equation modeling (SEM).

The qualitative analysis employed NVivo 14 to code interview and focus group data and extract thematic patterns, thereby supplementing the mechanism-based interpretation of quantitative results. In the integrative analysis stage, strategic directions were generated using SWOT/TOWS analysis based on combined quantitative and qualitative evidence. VMOST and SMART frameworks were then applied to structurally decompose strategies, and KPIs were established as standards for implementation

and evaluation, forming an iterative closed-loop system of "diagnosis–development–optimization–evaluation."

3.3 Delphi Implementation and Consensus Criteria

Two rounds of Delphi expert consultation were conducted. In the first round, experts evaluated the importance and feasibility of strategy items and indicators while providing revision suggestions. In the second round, the revised version was reassessed to examine consensus convergence. Consensus criteria were determined using the median, interquartile range (IQR), and coefficient of variation (CV) for each item, with $IQR \leq 1$ and $CV \leq 0.25$ adopted as reference thresholds for consensus achievement, thereby enhancing the stability and consistency of the strategy system and KPI indicators.

Research Results

1. Data Analysis Results

1.1 Analysis of the Current Status of Cadre Management

The cadre management scale constructed based on the five dimensions of morality, competence, diligence, performance, and integrity demonstrated strong reliability and validity (Cronbach's $\alpha = 0.996$, KMO = 0.879, $p < 0.001$). The results indicate that overall cadre management in the College was evaluated at a moderately high level ($M = 4.25$). Among the five dimensions, integrity received the highest score ($M = 4.38$), reflecting strong institutional compliance and self-discipline awareness. Morality and diligence were also rated at moderately high levels ($M \approx 4.26$). In comparison, competence ($M = 4.16$) and performance ($M = 4.18$) were relatively weaker, with major deficiencies concentrated in incomplete capability development systems, insufficient cross-departmental collaboration, and inadequate implementation of performance management systems.

For the lower-scoring dimensions, interview findings further indicated that capability development largely remained at the level of generalized training, lacking alignment with position-specific differences and competency frameworks. Cross-departmental collaboration was still dominated by transactional coordination, with limited process-based or data-driven collaborative tools and accountability mechanisms. Performance evaluation tended to emphasize outcomes over processes and compliance over improvement, while delayed feedback hindered continuous iterative improvement. Correlation analysis showed the strongest relationships between diligence and performance ($r = 0.917$) and between competence and performance ($r = 0.875$), suggesting that execution effort and capability development are the primary drivers of performance improvement. Overall, the key area for improvement in cadre management lies not in further strengthening morality or integrity, but in reinforcing the linkage among capability development, process investment, and performance outcomes. This conclusion provides direct input for subsequent strategy formulation.

1.2 Analysis of Transformational Leadership Needs of Deans of Secondary Colleges

The nine-dimensional leadership measurement instrument developed in this study demonstrated strong reliability and validity (Cronbach's $\alpha = 0.994$, KMO = 0.964, $p < 0.001$), with the overall leadership level rated as moderately high ($M = 4.03$). Among the dimensions, moral exemplarity received the highest score ($M = 4.14$), indicating broad recognition of deans' integrity, fairness, and ethical conduct. Leadership charisma, inspirational power, and visionary motivation were rated at intermediate levels ($M \approx 4.00$). Lower scores (all < 4.00) were observed in foresight, influence, decisiveness, control, and individualized support, reflecting deficiencies in strategic planning, resource integration, team coordination, and emotional support. Overall, the results present a deficiency profile characterized by strong moral leadership, limited strategic foresight, and comparatively weaker organizational mobilization and emotional support. Regression analysis indicated that moral exemplarity, leadership charisma, individualized support, influence, and decisiveness were key variables influencing overall leadership effectiveness. Interview findings further revealed common issues such as insufficient strategic foresight, incomplete institutional execution, formalized rather than substantive humanistic care, and limited external communication capacity, thereby corroborating the quantitative results. Accordingly, this study identifies "strategic foresight + execution closed-loop + individualized support" as priority directions for subsequent strategy development.

2. Internal and External Environmental Analysis

This study conducted a systematic diagnosis of fourteen dimensions—comprising the five dimensions of cadre management and the nine dimensions of deans' leadership—by integrating the McKinsey 7S framework and PESTEL analysis. Internal analysis was based on survey data and interview materials, while external analysis referenced institutional policy documents (e.g., Measures for the Assessment of Middle-Level Cadres of Honghe Vocational and Technical College) as well as national and provincial policies (e.g., National Vocational Education Reform Implementation Plan, Regulations on the Assessment of Party and Government Leading Cadres, and Opinions of Nine Ministries Including the Ministry of Education on Accelerating Educational Digitalization). A comprehensive 7S-PESTEL-SWOT analytical matrix was thereby constructed (see Table 1).

Table 1 SWOT Integrated Diagnostic Matrix

TOWS Matrix	Opportunities (PESTEL)	Threats (PESTEL)
	S (Internal Strengths)	T (External Threats)
Strengths (S) (7S)	Cadres demonstrate strong political integrity and professional ethics; Deans of Secondary Colleges show sound self-discipline and basic execution capacity, and the College has established a relatively standardized institutional system and cultural foundation.	Stricter accountability requirements and increased digital transparency generate greater public opinion pressure; intensified regional competition among Colleges may reduce overall institutional competitiveness if strategic capability

TOWS Matrix	Opportunities (PESTEL)	Threats (PESTEL)
Weaknesses (W) (7S)	W (Internal Weaknesses) Supervision and feedback mechanisms remain underdeveloped; training systems and career development pathways are insufficiently established; performance incentive structures are inadequate; cross-departmental collaboration is relatively weak; and strategic planning and individualized support mechanisms lack systematic integration.	and external influence remain insufficient. O (External Opportunities) National vocational education reform, educational digitalization, and regional industrial upgrading create favorable policy windows for improving governance effectiveness; meanwhile, expectations from society, faculty, and students for high-quality governance continue to increase.

The results in Table 1 indicate that the College possesses a solid foundation in value orientation and institutional culture; however, clear deficiencies remain in capability development, performance systems, strategic foresight, and support for individualized care, which constitute important bases for subsequent strategy formulation.

3. Development of the Preliminary Management Strategy

Based on the SWOT diagnosis, this study employed the TOWS matrix to combine internal strengths and weaknesses (S/W) with external opportunities and threats (O/T), thereby generating preliminary management strategy orientations. Specifically, WT strategies focus on strengthening institutional execution and supervisory closed-loop mechanisms to compensate for internal supervision deficiencies and prevent amplification of external accountability risks. WO strategies utilize policy support and digitalization opportunities to optimize performance evaluation and incentive mechanisms, improve training systems and career development pathways, and institutionalize emotional leadership and individualized support. ST strategies rely on existing institutional and value-based advantages to enhance deans' strategic foresight and decision-making capacity in response to reform pressures and competitive challenges. SO strategies leverage cultural and institutional strengths to strengthen external influence and vocational education branding, while deepening value orientation and cultural leadership. Based on these strategic directions, this study conducted brainstorming sessions involving 10 participants, including institutional leaders, functional department administrators, and Deans of Secondary Colleges. Following the VMOST and SMART principles, a top-down strategy framework was developed, resulting in a Strategy 1.0 draft consisting of one vision, seven missions, seven objectives, fourteen core strategies, forty sub-strategies, 120 projects/activities, and 200 KPIs, serving as a prototype for subsequent optimization.

4. Optimization of the Management Strategy Draft

4.1 Focus Group Feedback and Problem Identification

Building upon Strategy 1.0, a focus group composed of two institutional leaders, four functional department administrators, and four Secondary College administrators conducted a systematic review of the vision, missions, objectives, core strategies, sub-strategies, and KPIs. Three categories of implementation risks were identified. First, overlaps between missions and objectives led to dispersion of governance priorities. Second, excessive hierarchical layering of core and sub-strategies resulted in task accumulation and blurred responsibility boundaries. Third, redundancy among projects and KPIs increased evaluation complexity and implementation costs. Based on these findings, the focus group unanimously recommended "structural streamlining," including reducing the number of missions and objectives, simplifying strategic hierarchy, merging repetitive indicators, and retaining a core indicator set reflecting outcome-, process-, and development-oriented dimensions, thereby improving feasibility and evaluability.

4.2 Delphi Method Optimization Results

Based on focus group feedback, two rounds of Delphi consultation were conducted to review and revise the strategy framework. A five-point Likert scale was used to evaluate the importance and feasibility of items at each hierarchical level. The first round aimed to identify controversial items and collect revision suggestions, focusing on clarity of expression, appropriateness of hierarchical classification, implementability of execution pathways, and measurability of indicators. The second round aimed to verify consensus convergence and finalize the strategy text. For the second round, item-level statistics were calculated, including mean, median, interquartile range (IQR = $Q3 - Q1$), and coefficient of variation (CV = $SD/Mean$). Consensus thresholds were defined as $IQR \leq 1$ and $CV \leq 0.25$, evaluated separately for importance and feasibility. The hierarchical statistical results are presented in Table 2. Overall, items across all levels received relatively high ratings with low dispersion: mean importance scores ranged from 4.10 to 4.90, and mean feasibility scores ranged from 3.70 to 4.90, indicating strong expert agreement with the overall strategy system. Except for a small number of items at the projects/activities level that did not fully converge in feasibility (CV compliance rate = 98.7%, IQR compliance rate = 97.4%), suggesting higher dependence on resource conditions and cross-departmental coordination, all other levels met the predefined consensus thresholds for both importance and feasibility.

Table 2 Second-Round Delphi Hierarchical Statistical Results

Level	No. of Items	Importance Mean Range	Importance Median Range	Importance IQR Range	Importance CV Range	Feasibility Mean Range	Feasibility Median Range	Feasibility IQR Range	Feasibility CV Range	CV Compliance Rate (per level)	IQR Compliance Rate (per level)
Vision	1	4.50–4.50	4.5–4.5	1.00–1.00	0.157–0.157	4.50–4.50	5.0–5.0	1.00–1.00	0.157–0.157	100.0%/100.0%	100.0%/100.0%
Mission	5	4.20–4.90	4.0–5.0	0.00–1.00	0.093–0.175	4.20–4.70	4.0–5.0	0.00–0.75	0.096–0.156	100.0%/100.0%	100.0%/100.0%
Objectives	5	4.50–4.80	5.0–5.0	0.00–0.75	0.105–0.167	4.30–4.70	4.0–5.0	0.00–0.75	0.096–0.156	100.0%/100.0%	100.0%/100.0%

Core	10	4.20–4.80	4.0–5.0	0.00–1.00	0.091–0.185	4.20–4.80	4.0–5.0	0.00–	0.091–	100.0%/	100.0%/
Strategies								1.00	0.185	100.0%	100.0%
Sub-	20	4.20–4.90	4.0–5.0	0.00–1.00	0.096–0.246	4.10–4.80	4.0–5.0	0.00–	0.091–	100.0%/	100.0%/
strategies								1.00	0.185	100.0%	100.0%
Projects /	76	4.10–4.90	4.0–5.0	0.00–1.00	0.088–0.292	3.70–4.80	4.0–5.0	0.00–	0.091–	100.0%/	100.0%/
Activities								2.75	0.361	98.7%	97.4%
KPIs	110	4.10–4.90	4.0–5.0	0.00–1.00	0.088–0.246	3.90–4.90	4.0–5.0	0.00–	0.088–	100.0%/	100.0%/
								1.00	0.246	100.0%	100.0%

Based on the ratings and feedback obtained from the two rounds of Delphi consultation, the final Strategy 2.0 framework was established, achieving structural convergence from a "broad and dispersed" configuration to a "focused and practical" system. The vision remained unchanged; missions were consolidated from seven to five items, and objectives were reduced from seven to five. Core strategies were streamlined from fourteen to ten, and sub-strategies from forty to twenty. Projects/activities were reduced from 120 to 76, while KPIs were refined from 200 to 110. In addition, digital governance elements were embedded at both the strategy and project levels, thereby enhancing the practical adaptability and implementation feasibility of the overall framework (see Table 3 for details).

Table 3 Major Expert Consensus Achieved through the Delphi Method

Consensus Item	Consensus Content and Objective
1. Vision	The vision remains unchanged to maintain the stability and long-term direction of top-level strategy.
2. Mission	Consolidated from seven to five items, respectively focusing on governance effectiveness, training and development, strategic decision-making, external influence, and cultural leadership/emotional leadership as the core pillars.
3. Objectives	Reduced from seven to five, aligned one-to-one with the five missions, and clarified according to SMART requirements.
4. Core Strategies	Reduced from fourteen to ten, with each objective corresponding to two core strategies, thereby avoiding redundant and overlapping content.
5. Sub-strategies	Reduced from forty to twenty, forming a clear structure of "one core strategy—two sub-strategies."
6. Projects / Activities	Reduced from 120 to 76, retaining 3–5 key projects under each sub-strategy and emphasizing execution focus.
7.KPIs	Reduced from 200 to 110, prioritizing KPIs oriented toward outcomes, processes, and developmental improvement to enhance operational feasibility and sustainability.
8. Digital Governance Elements	Digitalization and intelligent governance approaches embedded across all hierarchical levels to strengthen alignment with the "education digitalization strategy initiative."

5. Formation of the Final Strategy Framework

Based on the integrated evidence chain of "quantitative profiling—qualitative interpretation—strategy development—consensus optimization," this study ultimately established Strategy 2.0 for enhancing the transformational leadership of Deans of Secondary Colleges. The framework consists of one vision, five missions, five objectives, ten core strategies, twenty sub-strategies, seventy-six projects/activities, and 110 KPIs (the vision–mission–objectives are presented in Table 4, and examples of core strategies–sub-

strategies–projects/activities–KPIs are shown in Table 5). Compared with Strategy 1.0, Strategy 2.0 demonstrates substantial improvements in structural hierarchy, terminology consistency, digital integration, and indicator evaluability. The framework more effectively aligns with the diagnostic findings presented earlier: addressing governance deficiencies through capability development and performance improvement, and advancing leadership enhancement along the main trajectory of strategic foresight, execution closed-loop mechanisms, and individualized support. In doing so, it establishes a replicable closed-loop pathway and provides higher vocational Colleges with an actionable governance toolkit for middle-level leadership development.

Table 4 Vision, Missions, and Objectives of Strategy 2.0

Strategic Item	Quantity	Optimized Vision and Content
Vision	1	By 2028, build a team of Deans of Secondary Colleges characterized by strong political commitment, outstanding capability, integrity and efficiency, innovation, and people-centered leadership, thereby comprehensively enhancing governance effectiveness and social influence in higher vocational education.
Mission	5	Mi1: Improve performance evaluation and incentive mechanisms. Mi2: Enhance training and career development pathways. Mi3: Strengthen strategic foresight and decision-making capacity. Mi4: Expand external influence and cultural leadership. Mi5: Reinforce emotional leadership and individualized support.
Objectives	5	Ob1: By the end of 2026, establish a closed-loop system for institutional execution and supervision, improve performance incentive mechanisms, achieve a system implementation compliance rate above 90%, and reach cadre satisfaction levels above 85%. Ob2: By 2027, develop an integrated"training–assessment–promotion" system, ensuring that at least 30% of young cadres enter the reserve cadre pool and that training participation rates exceed 90%. Ob3: By 2027, significantly improve strategic planning capability, achieving over 80% implementation of strategic planning outcomes and producing at least one high-quality strategic research report annually. Ob4: By 2027, increase industry–education integration cooperation projects by more than 20%, significantly enhance institutional brand influence, and achieve over 90% faculty recognition of institutional cultural values. Ob5: By the end of 2026, establish a normalized support mechanism for individualized care, ensuring satisfaction with leadership support exceeds 85% and annual faculty development investment reaches 500,000 RMB.
Note:"Ob" denotes Objectives;"M" denotes Missions.		

Explanation of Table 4: Strategy 2.0 is developed according to a three-level structure of"Vision–Mission–Objectives": the vision clarifies the overall direction toward 2028; the five missions define the main governance lines; and the five objectives further translate the missions into assessable stage-based performance indicators. Each objective specifies clear time nodes and quantitative thresholds, collectively meeting SMART requirements, and corresponds to the key deficiencies identified in the earlier diagnosis,

including institutional execution, capability and performance, strategic decision-making, and humanistic support, thereby providing the basis for subsequent decomposition into "Strategies–Projects/Activities–KPIs."

Table 5 Main Content of Core Strategies, Sub-strategies, Projects/Activities, and KPIs in Strategy 2.0

Core Strategy	Sub-strategy	Projects / Activities	Key Performance Indicators (Core KPIs)
A: Improve Assessment Implementation and Supervision Closed-loop	A1: Revise and optimize the assessment system	Formulate and improve cadre assessment measures; strengthen rigid constraints and feedback mechanisms combining "moral evaluation" and performance indicators.	Assessment system revised and implemented; $\geq 60\%$ of assessment indicators linked to performance evaluation and cadre appointment systems.
	A2: Establish diversified supervision and feedback mechanisms	Develop a cadre supervision database and risk monitoring platform; improve supervision and feedback adjustment mechanisms.	Supervision coverage rate 100%; rectification completion rate $\geq 85\%$; risk platform established and operational.
B: Optimize Performance Assessment and Incentive Mechanisms	B1: Reform the performance indicator system	Optimize performance indicators, emphasizing quality, innovation, and process orientation; implement performance feedback mechanisms.	New indicator system released; innovation-related indicators $\geq 30\%$; performance feedback closure rate $\geq 95\%$.
	B2: Establish differentiated incentive and support mechanisms	Implement a "dual-evaluation + dual-track" mechanism; improve career development and performance recognition systems.	High-level talent retention rate $\geq 5\%$; completion rate of performance incentive programs $\geq 90\%$.
C: Establish Systematic Training Framework	C1: Strengthen leadership and cadre capability development	Conduct leadership training for Deans of Secondary Colleges; establish competency frameworks and leadership development profiles.	Training plans released; participation rate $\geq 90\%$; competency framework published; annual updates completed.
	C2: Promote job rotation and cross-functional learning	Implement job rotation and case-based learning mechanisms to enhance cross-departmental collaboration and experience exchange.	Rotation coverage $\geq 20\%$; case discussions completed; capability improvement $\geq 15\%$.
D: Build Career Development and Promotion Pathways	D1: Implement young cadre development programs	Establish mentoring systems and individualized growth plans for young cadres.	Reserve cadre pool established; promotion rate of young cadres $\geq 20\%$.
	D2: Integrate training outcomes into promotion mechanisms	Link training achievements with promotion assessment mechanisms.	Policy implemented; training achievement recognition rate 100%; promotion effectiveness $\geq 90\%$.
E: Strengthen Strategic Planning and Research Capacity	E1: Promote long-term institutional planning	Develop medium- and long-term development plans and annual implementation roadmaps.	Planning documents completed; implementation rate $\geq 85\%$.
	E2: Establish annual strategic research mechanisms	Conduct annual strategic seminars and produce annual strategy reports.	Strategy seminars and reports completed annually; participation rate $\geq 85\%$.
F: Enhance Digital Governance and	F1: Develop digital decision-support platforms	Establish data-driven analysis platforms to strengthen decision-making support.	Platform operational; data upload rate $\geq 95\%$; utilization rate $\geq 85\%$.

Core Strategy	Sub-strategy	Projects / Activities	Key Performance Indicators (Core KPIs)
Decision Support	F2: Conduct scenario-based decision simulations	Conduct scenario-based simulations and case reviews for deans to establish a decision-evaluation mechanism.	≥2 simulation exercises per year; ≥5 case studies completed; knowledge transformation rate ≥70%.
G: Institutionalize External Cooperation and Brand Development	G1: Expand College-enterprise and regional cooperation G2: Develop brand communication platforms	Establish College-enterprise cooperation and external coordination mechanisms; incorporate collaboration outcomes into performance assessment. Build brand promotion and communication platforms; strengthen cultural dissemination and external visibility.	≥10 strategic cooperation agreements signed; annual cooperation projects increase by ≥10%; industry participation included in assessment mechanisms. Platform operational; ≥4 media releases per month; annual visit growth ≥20%.
H: Strengthen Cultural Leadership and Demonstration Effects	H1: Promote cultural communication and dissemination H2: Establish routine value-oriented leadership mechanisms	Organize cultural theme activities and case-based communication; enhance value-oriented leadership. Implement the "Dean's First Lecture" and ideological-political teaching demonstration evaluation mechanisms.	≥2 cultural activities annually; ≥10 typical case reports published. System implemented; ≥2 lectures annually; ≥5 demonstration evaluations conducted.
I: Institutionalize Faculty Development and Care Support	I1: Implement young faculty development programs I2: Improve mentoring and support mechanisms	Establish faculty growth funds and development support mechanisms. Establish mentoring teams and guidance evaluation systems integrating moral assessment and psychological support.	Development plans released; fund implementation rate 100%. Mentor matching rate 100%; teaching quality improvement ≥15%; violation rate reduced by ≥30%.
J: Promote Digitalization and Humanistic Care Integration	J1: Build faculty needs feedback platforms J2: Conduct individualized development consultation mechanisms	Establish demand collection and feedback systems to support faculty development. Implement regular "face-to-face" consultations between deans and faculty; generate individualized development reports.	Platform operational; demand response timeliness ≥85%. ≥2 consultation sessions per semester; individualized report completion rate 100%.

Explanation of Table 5: Table 5 presents Strategy 2.0 according to the structure of "Core Strategies-Sub-strategies-Projects/Activities-Core KPIs," forming an execution chain from governance direction to action implementation and then to quantitative evaluation. The core KPIs shown in the table correspond directly to the diagnosed deficiencies. For the deficiency of strategic foresight, the core KPIs are mainly reflected in E1/E2 (release of medium- and long-term plans, strategic deliberation mechanisms and annual reports, and task list completion rates), F1/F2 (data platform deployment and utilization rates, frequency of scenario simulations and experience transformation rates), and Ob3 (satisfaction with strategic planning and the number of adopted high-quality annual strategic analysis reports). For the deficiency of individualized support, the core KPIs are mainly reflected in J1 (timely response rate of the needs feedback platform), J2 (frequency of dean dialogue activities and coverage of individualized development reports), and Ob5 (faculty and student satisfaction with individualized support and investment in faculty

development funds). These indicators directly measure the degree of improvement in the identified deficiency dimensions and avoid KPIs remaining limited to process-based" completion rates."

Discussion of Results

His study conducted a quantitative diagnosis based on the five dimensions of cadre management and the nine dimensions of transformational leadership of Deans of Secondary Colleges, and identified key contextual constraints through the integration of the 7S framework and PESTEL analysis. The combination of "quantitative profiling + qualitative interpretation" was translated into actionable strategic priorities and developed into a structured strategy system. Through focus groups and Delphi consensus procedures, the strategy structure and indicator system were further converged and optimized, ultimately forming an integrated scheme of "Vision–Mission–Objectives–Strategies–Projects/Activities–KPIs." Centered on vision, missions, and objectives, the scheme covers key domains including institutional execution, performance incentives, training and development, strategic deliberation, cultural leadership, faculty care, and digital governance. Overall, the findings are consistent with major domestic and international perspectives on vocational education governance and institutional leadership, while achieving localized and refined implementation within the context of Chinese higher vocational Colleges.

First, from the perspective of the macro governance environment, internal analysis indicates that Honghe Vocational and Technical College possesses a clear strategic orientation, institutional foundation, and supportive cultural climate, yet remains relatively weak in capability development, feedback mechanisms, and cross-departmental collaboration. External analysis shows that national vocational education reform, educational digitalization strategies, and increasing social supervision create development opportunities while simultaneously intensifying governance pressure. These findings align with recent studies: Liu, & Tong (2023) identified a structural imbalance of "strong institutions but weak capabilities" in higher vocational governance, while Jiang, et al. (2023), through a review of China's educational digitalization policies, found that policy reforms impose higher demands on quality assurance and execution capacity, accelerating transformation in institutional management models. Accordingly, the deficiencies revealed in this study reflect a structural gap at the organizational level involving capability construction, performance mechanisms, and care support. This also explains why strong moral performance does not automatically translate into strong performance outcomes. The dual-path strategy of "internal optimization + external response" proposed in this study therefore demonstrates clear practical relevance.

Second, regarding strategy content, the ten core strategies proposed in this study are supported by recent theoretical and empirical research both domestically and internationally. Core Strategy A emphasizes the establishment of a closed-loop mechanism for institutional execution and supervision, aligning with Shaked's (2018) warning against excessive leniency in school evaluation systems. Core Strategy B focuses on optimizing performance assessment and incentive mechanisms, consistent with Sartain, et al. (2024) regarding fairness in teacher evaluation. The systematic training framework proposed in Core Strategy C is supported by Meng, & Chang (2024), who demonstrated the significant impact of leadership training on

organizational performance. Core Strategy D highlights career development pathways, consistent with Toropova, et al. (2021), who emphasized developmental support as essential for middle-level retention and growth. Strategies E and F address strategic planning, data literacy, and digital governance, aligning with Lee, et al. (2024) on principals' data literacy and organizational data culture. Strategies G and H emphasize external cooperation, cultural leadership, and demonstration effects, consistent with Zhou, & Xu (2023) on industry–education integration and Li, & Shi (2008) on localized leadership theory. Strategies I and J focus on faculty development and humanistic care, supporting Yu, & Xiang (2025), who demonstrated that caring leadership significantly enhances teacher well-being and organizational commitment. Overall, the strategy system achieves a balanced integration between "hard governance" (institutional execution, performance management, strategic planning) and "soft leadership" (cultural leadership, emotional support, and organizational identity).

Finally, from a methodological perspective, this study embeds VMOST, SMART, and KPI frameworks throughout the strategy development process, enabling a clearly structured and logically closed-loop relationship among "Vision–Strategy–Execution–Evaluation," which is highly consistent with Proctor, et al. (2011) implementation framework. Notably, this study represents the first systematic integration in Chinese higher vocational Colleges of the "morality–competence–diligence–performance–integrity" framework, the nine-dimensional leadership model, and strategic management tools, thereby providing a replicable analytical pathway for research on middle-level leadership.

In summary, the systematic strategy proposed in this study not only addresses key issues in cadre management and leadership development of Deans of Secondary Colleges but also advances vocational education governance research in terms of theoretical integration, methodological tool integration, and strategy implementation. It provides both practical foundations and theoretical reference for improving governance capacity and the professionalization level of cadres in higher vocational Colleges, particularly in frontier regions.

Recommendations

1. Recommendations Based on Research Findings

Practical recommendations derived from the research findings are as follows: (1) Addressing the structural weakness of relatively low competence and performance: Priority should be given to establishing an integrated capability development chain combining training, assessment, and promotion. Training outcomes should be linked with promotion, job rotation, and performance allocation in order to reduce governance efficiency losses caused by homogeneous training and distorted incentive mechanisms. (2) Addressing insufficient strategic foresight: It is recommended to institutionalize annual strategic deliberation and medium- to long-term planning mechanisms, develop data-driven decision-support platforms, and enhance evidence-based decision-making capacity through scenario simulation training, thereby transforming foresight capability from individual experience into organizational competence. (3) Addressing insufficient individualized support: Faculty and student needs feedback platforms, dean dialogue

mechanisms, and individualized development report systems should be institutionalized, accompanied by stable faculty development funding to ensure that humanistic care is supported through institutional provision rather than constrained by routine administrative pressures. (4) Addressing insufficient collaboration and external influence: Colleges should promote normalized College–enterprise and regional collaboration mechanisms, incorporate cooperation outcomes into performance evaluation and brand communication, and enhance the cross-boundary influence and resource integration capacity of middle-level leadership positions.

2. Recommendations for Future Research

This study adopts Honghe Vocational and Technical College as a single-case study. Although the case is representative, the generalizability of the findings requires validation through cross-institutional and cross-regional comparative research. Future studies are recommended to conduct multi-case comparisons and quantitative testing across different regions and types of higher vocational Colleges to evaluate the transferability of Strategy 2.0; implement longitudinal tracking studies to verify the sensitivity and sustainability of the KPI system; and further incorporate CFA/SEM and more refined causal identification methods to enhance measurement rigor and explanatory robustness.

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