

The Value Implication of the Spirit of Nanfan in the Ideological and Political Course of Vocational Undergraduate Research on the Practice Path

Zeyu Qu, Heng Tang

Hainan Vocational University of Science and Technology Hainan 571126

Abstract: The Nanfan Spirit, a noble ethos cultivated through generations of agricultural scientists in Hainan's breeding practices, embodies the core values of patriotism, dedication, innovation, and selfless contribution. As a vital resource for ideological and political education in vocational undergraduate programs, this spirit aligns perfectly with the applied, practical, and professional nature of vocational education. Its integration can significantly enhance the political guidance, professional identity, and innovative drive of ideological courses. This paper proposes concrete implementation pathways across four dimensions: theoretical teaching frameworks, practical teaching models, faculty development, and collaborative education mechanisms, aiming to provide theoretical references and practical insights for the reform and innovation of ideological courses in vocational undergraduate education.

Keywords: Nanfan Spirit; Vocational Undergraduate Education; Ideological and Political Courses; Value Implications; Practical Approaches

DOI:10.12417/3029-2344.25.11.007

1.Theoretical Connotation and Contemporary Interpretation of the Nanfan Spirit

1.1 Historical Formation and Core Connotation of Nanfan Spirit

The spirit of Nanfan was born in a unique geographical environment and historical context. Due to its distinctive climate conditions, Hainan Island has become an ideal place for Chinese agricultural researchers to conduct breeding and shorten the breeding cycle. Since the 1950s, agricultural researchers from all over the country have come to Hainan for breeding every year, forming the unique "Nanfan" phenomenon in China. The harsh natural conditions, rudimentary working environment, and long research cycles collectively shaped the fundamental character of the Nanfan spirit.

The Nanfan Spirit embodies profound theoretical significance, with its core essence interpretable through four dimensions. First, the patriotic spirit of serving the nation and revitalizing China. The Nanfan endeavor directly impacts national food security and seed industry development. Generations of Nanfan workers have integrated personal aspirations into the broader national development agenda. For instance, corn expert Cheng Xiangwen spent over fifty years celebrating the Spring Festival in Sanya's cornfields, demonstrating deep patriotic devotion. Second, the pragmatic and tenacious professional dedication. Despite challenging conditions, Nanfan researchers remain steadfast in their posts. Cotton expert Du Xiongming's exhaustive search across China for wild cotton varieties culminated in discovering Pompom cotton in the remote Sansha City, epitomizing unwavering commitment to their mission. Third, the innovative spirit of breaking conventions and pioneering progress. From discovering "wild rice" to achieving three-line hybrid rice systems, and successfully breeding "Shanyou 63," Nanfan workers continuously overcome technical barriers, driving innovation in the seed industry. Fourth, the selfless dedication to public service. Generations of Nanfan workers toil silently in fields far from family. Take Wu Mingzhu, dubbed the "Sweet Melon Academician," who devoted herself to melon research, enabling people to enjoy "free melon consumption" and exemplifying selfless dedication.

1.2 The Contemporary Characteristics and Value Sublimation of the Nanfan Spirit

Entering the new era, the spirit of Nanfan has been endowed with more distinct contemporary connotations and practical values. Against the backdrop of the in-depth implementation of the national strategy of "storing grain in land and storing grain in technology" and the comprehensive advancement of the Hainan Free Trade Port construction, the spirit of Nanfan in the new era prominently demonstrates three major characteristics of the times. First, the innovative pursuit of self-reliance and self-improvement in science and technology. Facing the fierce international competition in the seed industry and the major challenge of national food security, the spirit of Nanfan takes independent innovation as its core, striving to achieve self-reliance and self-improvement in seed industry technology and autonomous control of seed sources. In April 2018, during his inspection in Hainan, General Secretary Xi Jinping explicitly required that the national Nanfan scientific research and breeding base be transformed into a "Nanfan Silicon Valley" serving the whole country, pointing the way for seed industry innovation in the new era. Second, the mission and responsibility of serving national strategies. The Nanfan cause is deeply aligned with major national strategies such as ensuring national food security and comprehensively advancing rural revitalization, always adhering to the original mission of breeding for the country and serving the overall situation, demonstrating the sense of responsibility of embracing "the greater good of the nation." Third, an international vision with a global perspective. Nanfan is not only a key support for safeguarding China's food security but also contributes Chinese wisdom and Chinese solutions to solving global food security challenges, vividly embodying the great country sentiment of helping build a world free from hunger and poverty with Chinese high-quality seeds and the concept of a community with a shared future for mankind.

1.3 Analysis of the Compatibility between Nanfan Spirit and Vocational Undergraduate Education

The Nanfan Spirit and vocational undergraduate education share profound alignment in value orientation, practical approaches, and core principles. Both fundamentally serve national strategies. The Nanfan Spirit focuses on national food security as a "national priority," while vocational education supports industrial transformation and high-quality economic development, collectively embodying the mission of serving the nation through education and strengthening the country through skills. In practice, both emphasize the unity of knowledge and action. The Nanfan Spirit emerged from long-term fieldwork and agricultural research, while vocational education adheres to industry-education integration and work-study integration. Both prioritize acquiring knowledge through practice and achieving results through action. In spirit, their core values are deeply aligned. The Nanfan Spirit's qualities of perseverance and excellence resonate with the craftsmanship ethos promoted in vocational education, providing rich spiritual nourishment and value guidance for cultivating students' professional ethics and strengthening their career convictions.

2. The Value Implication of Integrating the Nanfan Spirit into Ideological and Political Courses in Vocational Undergraduate Education

2.1 Strengthening Political Orientation and Consolidating the Ideological Foundation of Food Security and Seed Industry Revitalization

The primary value of integrating the Nanfan Spirit into ideological and political education courses at vocational undergraduate institutions lies in reinforcing political orientation. This approach guides students to deeply comprehend the strategic significance of food security and seed industry revitalization, while strengthening their sense of national identity and responsibility. Vocational undergraduate education aims to cultivate high-quality technical professionals, master craftsmen, and national-level artisans. As future frontline workers in industries, these students bear the crucial mission of implementing technologies and empowering industrial development, necessitating a close alignment between personal skill growth and national development needs. By incorporating the Nanfan Spirit into ideological education through concrete cases and vivid narratives — such as recounting Academician Yuan Longping's groundbreaking research journey that "changed the world with a single seed" —

students can intuitively grasp the foundational role of agricultural technology in national progress. This spirit-driven, case-based educational approach transforms abstract food security theories into tangible, understandable content. It helps vocational students align their career planning with national strategic demands, fostering a value pursuit of "writing papers on the land of our motherland." Ultimately, this cultivates new-era technical professionals who combine technical expertise, social responsibility, and patriotic sentiment.

2.2 Deepen the professional identity and cultivate the sense of mission and responsibility of technical and skilled personnel

Vocational undergraduate education plays a vital role in cultivating high-level technical professionals with both exceptional skills and profound dedication. However, many graduates today struggle with career disengagement and lack of professional identity. Integrating the Nanfan Spirit into ideological and political education offers a practical solution to this challenge. By drawing inspiration from the inspiring stories of Nanfan scientists who dedicated themselves to agricultural research, students can develop a deep connection with farming and their chosen fields. The Nanfan Spirit embodies values like perseverance, practicality, excellence, and selfless contribution—qualities that resonate strongly with the craftsmanship ethos emphasized in vocational education. Incorporating these principles into ideological education helps students overcome impatience and utilitarianism, fostering proper career values and personal growth perspectives. This approach encourages students to actively pursue professional fields, achieving a harmonious alignment between personal fulfillment and national needs through hands-on work.

2.3 Stimulate the motivation of innovation and cultivate the technical and skilled personnel who combine knowledge with practice

The spirit of innovation, as both the essence of the Nanfan Spirit and an indispensable quality for vocational undergraduate talents in the new era, aligns perfectly with the objectives of talent cultivation. Integrating the Nanfan Spirit into ideological and political education courses breaks down the barriers between innovation education and value guidance, effectively awakening students' innovative awareness and honing their practical skills. From traditional breeding to molecular breeding, from empirical exploration to scientific experimentation, generations of Nanfan researchers have continuously overcome technical bottlenecks, driving progress in seed industry technology. By introducing these innovative cases into ideological and political education, students can not only intuitively grasp the value and power of innovation but also develop actionable models for practical thinking. Furthermore, ideological and political courses can leverage the practical nature of the Nanfan Spirit by organizing students to participate in breeding practices and field observations. This approach breaks down the divide between theory and practice, gradually enhancing comprehensive competencies in solving complex professional problems, and achieving an organic integration of knowledge acquisition, skill development, and value cultivation.

3. Practical Path of Integrating the Nanfan Spirit into Ideological and Political Courses in Vocational Undergraduate Education

3.1 Building a Tripartite Teaching System

Building a scientifically sound and practical teaching system is crucial for integrating the Nanfan Spirit into ideological and political education at vocational undergraduate institutions, achieving value guidance and talent cultivation goals. To incorporate the Nanfan Spirit into vocational undergraduate ideological and political courses, we must leverage the distinctive educational approach of "industry-education integration and unity of knowledge and practice," focusing on constructing a tripartite and organically connected teaching system that combines theoretical instruction, practical training, and specialized education. At the theoretical level, we should develop specialized modules on the Nanfan Spirit based on the ideological and political course syllabus, systematically explaining its historical context, core essence, and contemporary value. For practical training, we should utilize Hainan's abundant Nanfan resources to establish a "mobile ideological and political course" model by innovating practical approaches. Additionally, we should enhance the application of virtual simulation technology to develop VR experience projects

about the Nanfan Spirit, breaking geographical limitations to allow more students to experience the hardships and greatness of Nanfan scientific research.

3.2 Innovative and Multi-dimensional Integration of Practice Models

To deeply integrate the Nanfan Spirit into ideological and political education at vocational undergraduate institutions, we must proactively transcend the temporal and spatial limitations of traditional classrooms. Grounded in the practical orientation of vocational education, we should establish a diversified "field + cloud + society" integrated practice model. Field-based classrooms serve as the core platform and distinctive vehicle for Nanfan Spirit practice teaching, organizing students to participate in seed breeding activities and agricultural operations. Through hands-on labor, students gain a profound understanding of the Nanfan Spirit, achieving an organic combination of labor education and spiritual guidance. Cloud platforms provide crucial support for expanding the temporal and spatial dimensions of practical teaching while breaking geographical constraints. Establishing a digital resource repository for the Nanfan Spirit facilitates students' self-directed learning. Meanwhile, utilizing virtual simulation technology to develop Nanfan research experience projects enhances the immersion, interactivity, and engagement of practical teaching. Social classrooms represent an important extension and value realization of Nanfan Spirit practice teaching. By organizing social service activities such as Nanfan Spirit lectures, seed industry science popularization, and rural revitalization research based on societal needs, students not only deepen their understanding of the Nanfan Spirit but also strengthen their sense of social responsibility and practical skills, achieving a dual empowerment of spiritual inheritance and capability enhancement.

3.3 Building a structurally optimized teaching staff

The faculty team serves as the cornerstone for integrating the Nanfan Spirit into ideological and political education. Vocational undergraduate institutions should establish an optimized faculty structure combining full-time, part-time, and specially appointed teachers to enhance the educational quality and teaching effectiveness of incorporating the Nanfan Spirit into ideological courses. Full-time teachers, as the backbone of instruction, can strengthen their theoretical interpretation and classroom teaching skills through specialized training, field visits, and collaborative lesson planning. Part-time teachers, serving as a vital supplement, may include experts from relevant departments who deliver specialized lectures or guide practical teaching, thereby elevating the professionalism and authority of course content. Specially appointed teachers, representing a distinctive component of the faculty, may include veteran Nanfan experts and model workers who regularly provide instructional guidance and academic exchanges. Additionally, ideological and political educators should be encouraged to undertake fieldwork at Nanfan bases, engaging directly in breeding practices and immersive research to enhance the practicality and appeal of their teaching.

3.4 Improving the Supporting Mechanisms of the System

A sound safeguard mechanism serves as a crucial foundation for the sustainable integration of the Nanfan Spirit into ideological and political education courses at the vocational undergraduate level. Regarding evaluation mechanisms, a diversified assessment system should be established, incorporating the learning outcomes of the Nanfan Spirit into the evaluation of ideological and political courses, and including the educational achievements of the Nanfan Spirit in teachers' performance evaluations and professional title reviews, thereby motivating teachers to actively engage in teaching innovation.

In terms of resource development, efforts should be intensified to enhance the teaching resources of the Nanfan Spirit and establish an integrated resource platform. Concurrently, collaboration between schools and local communities should be strengthened to broaden the channels for teaching resources. Regarding collaborative mechanisms, a well-established school-government-industry-enterprise collaborative education mechanism should be implemented to break down barriers between schools and society.

4. Epilogue

The Nanfan Spirit, a precious spiritual legacy forged by China's agricultural scientists through decades of practice, aligns perfectly with the value orientation, practical essence, and innovation demands of vocational undergraduate education. Integrating this spirit into ideological and political courses not only enriches curriculum content and innovates teaching methods, but also strengthens the courses' political guidance, vocational orientation, and innovation incentives, providing spiritual nourishment for cultivating high-quality technical talents with both moral integrity and professional skills. Vocational undergraduate institutions should seize this opportunity to combine Nanfan Spirit education with their institutional characteristics, disciplinary features, and student profiles, exploring school-specific educational models to contribute to nurturing the new generation capable of shouldering the great mission of national rejuvenation.

References:

- [1] Yang Wanling, Hu Hua, Zhao Yunbo. Construction and Practice of Teaching System for Vocational Undergraduate Ideological and Political Courses from the Perspective of Comprehensive Ideological and Political Education[J]. *Anhui Education Research*, 2026, (03): 73-75.
- [2] Wang Kaixuan, Li Jiyan. The Rich Connotations, Contemporary Value and Promotion Path of the 'Nanfan Spirit'[J]. *Journal of Beijing Agricultural Vocational College*, 2025, 39(05): 57-63.
- [3] Wang Kaixuan, Chen Binlin. "The 'Nanfan Spirit' Empowers the Construction of Grand Ideological and Political Education"[J]. *Education and Teaching Forum*, 2025, (02): 45-48.
- [4] Promoting the Excellent Qualities of the Older Generation of Agricultural Researchers and Using China Seeds to Ensure China's Food Security[J]. *China News Release (Practical Edition)*, 2023, (01): 36-39.
- [5] You Mengyu. The South China Breeding Program: 'Planting for the World'[N]. *Hainan Daily*, 2022-06-13(B06).