

Literature review on the educational effectiveness of the college system in universities from the perspective of the five-facet education

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Abstract. This study presents a comprehensive literature review on the educational effectiveness of the collegiate system in universities, viewed through the lens of the Five Educations framework. By systematically reviewing domestic and international research from 1990 to 2024, this paper analyzes scholarly findings and practical implementations of the collegiate system across five key dimensions: moral education, intellectual education, physical education, aesthetic education, and labor education. The findings reveal that the collegiate system—through mechanisms such as community engagement, mentorship programs, general education, cultural activities, and labor practices—can effectively support students’ holistic development. However, current research still exhibits several shortcomings, including limitations in research design, homogeneity in data analysis methods, imbalance in content coverage, and a short-term perspective in argumentation. These issues hinder a comprehensive understanding of the system’s educational impact. Future research should broaden sample scopes to include more diverse types of institutions and disciplines; strengthen quantitative research while integrating qualitative analysis; address the underrepresentation of physical, aesthetic, and labor education; and explore the long-term impacts of the collegiate system on student development. By pursuing these directions, future studies can more comprehensively assess the educational effectiveness of the collegiate system and offer stronger theoretical and practical guidance for its development.

Keywords: collegiate system, educational effectiveness, five educations

1. Introduction

Amid the accelerating pace of globalization, higher education is undergoing profound transformations. The collegiate system, as an educational model that integrates the spirit of traditional academies with the principles of modern universities, has flourished in recent years in both domestic and international contexts. It has increasingly become a significant vehicle for educational innovation, drawing sustained attention from the academic community. Both in China and abroad, the implementation of the collegiate system in higher education institutions has witnessed rapid growth, making it a vital force driving the reform of higher education. Against this backdrop, conducting an in-depth exploration of the educational effectiveness of the collegiate system not only deepens our understanding of this educational model but also offers valuable insights for the future development of higher education.

Existing studies indicate that the collegiate system—through the creation of academic communities, strengthened mentorship, and organization of distinctive activities—has yielded positive results in promoting students’ holistic development. This model goes beyond the transmission of knowledge, placing emphasis on nurturing comprehensive abilities through immersive environments. Tracing the conceptual evolution of the collegiate system reveals its transformation from a traditional residential model to a modern integrated educational framework. Huang Houming defines the collegiate system as a management model anchored in student residences, with the core aim of promoting students’ all-around development [1]. Chen Xiaobin emphasizes that the system effectively cultivates critical thinking and strong humanistic literacy by blending general education with informal education [2]. Cai Junlan further highlights the successful integration of the cultural essence of ancient Chinese academies and Western residential colleges, forming a unique philosophy of holistic education [3].

Aligned with the current educational mandate of “integrated development across the Five Educations” in the new era, this paper argues that the core value of the collegiate system lies in its ability to promote students’ comprehensive development in

morality, intellect, physique, aesthetics, and labor through diversified educational approaches and a community-oriented living environment—thus establishing a multidimensional education system.

2. Research methodology

This study adopts a systematic literature screening strategy to conduct a critical review of research on the educational effectiveness of the collegiate system from 1990 to 2024, both in China and abroad. It provides a comprehensive overview of relevant literature, with a particular focus on the practical experiences of typical universities in China, the United States, and the United Kingdom. Through cross-cultural comparisons, the study seeks to identify the shared characteristics and developmental trends of the collegiate system in fostering student development.

During the literature selection process, the following criteria were rigorously applied: First, the content must be directly related to the educational effectiveness of the collegiate system; second, the studies must employ either empirical research or theoretical analysis to ensure scientific rigor; and third, the selected literature must possess a certain level of academic influence or representativeness. English-language sources were primarily drawn from SSCI-indexed journals on the Web of Science platform, while Chinese sources were mainly selected from CSSCI journals indexed by CNKI (China National Knowledge Infrastructure).

For the analysis stage, this study employed content analysis to categorize and extract themes from the selected literature. Through this process, the research not only highlights key findings and achievements in moral, intellectual, physical, aesthetic, and labor education within the collegiate system, but also critically examines the limitations of current research and suggests future directions. This comprehensive analytical framework contributes to a more holistic understanding of the mechanisms and outcomes of the collegiate model, thereby offering strong support for improving its overall educational quality.

3. Current state of research

3.1. Moral education

In the field of moral education under the collegiate system, both domestic and international scholars have focused on how to cultivate students' sense of social responsibility and moral character through diverse approaches such as institutional optimization and cultural education. These studies examine the effectiveness and far-reaching impact of the collegiate system in moral education from multiple dimensions. Empirical findings indicate that this model has a tangible and positive effect on students' overall quality development.

Internationally, researchers have used empirical methods and case analyses to demonstrate the significant role of the collegiate system in moral education. For example, Bloomdahl et al. employed intervention strategies to successfully improve the collaboration mechanisms and productivity of a dysfunctional student union. By designing trust-building and planning activities, they significantly enhanced organizational efficiency and member engagement, contributing to the establishment of effective student governance structures and making notable progress in teamwork and leadership training [4]. Rose et al. focused on the use of a point-based system within residential colleges and found that such systems significantly motivated students to participate in community activities, with a positive correlation between point accumulation and student engagement [5]. Hersh further explored the unique value of the collegiate system in contemporary higher education, emphasizing its ability to cultivate critical thinking and communication skills, while also stimulating students' moral awareness and sense of social responsibility. In some U.S. colleges, features such as small class sizes, a strong focus on undergraduate education, and enhanced faculty-student interaction were found to significantly contribute to graduates' moral judgment and social responsibility [6].

In China, scholars have similarly explored the role of the collegiate system in moral education from various perspectives. Xiang Juhu and colleagues noted that the modern university collegiate system, based on the concept of holistic education and the tutorial system, effectively fosters students' ideological and moral development, value formation, and personal growth [7]. Zhao Zengzhen emphasized how the collegiate model enriches ideological and political education by integrating co-curricular activities, general education, and community-based living, forming a "trinity" educational system that combines ideological courses, general quality courses, and specialized instruction [8]. Shen Yueqing and others argued that the collegiate system promotes student development through a process of "immersion," "edification," and "cultivation," which reflects the fundamental essence of higher education [9]. Ma Huahua specifically highlighted the utilization of cultural resources from Yuelu Academy to conduct "Grand Ideological and Political Education" (da sixiang zhengzhi ke). By integrating the academy's traditions of "moral cultivation and service to the people," the practical culture of Huxiang (Hunan), and the revolutionary culture of "seeking truth from facts," the program effectively nurtures patriotism, social responsibility, and cultural confidence among students [10]. Zhou Chuangbing and colleagues advocated for the implementation of "Four-Self Education" (self-directed learning, self-management, self-education, and self-driven growth) to comprehensively develop students' autonomy and self-development capacities, thereby fulfilling the fundamental goal of moral education [11]. Liu Xueyan also noted that the

collegiate system, through general education, cultural activities, and community-based management, significantly enhances students' moral character and behavioral development, laying a solid foundation for holistic growth [12].

In summary, both domestic and international studies confirm that the collegiate system—through a variety of programs and its distinctive community environment—can effectively promote moral development in students. Whether by optimizing institutional structures or cultivating a cultural atmosphere, the collegiate model demonstrates immense value and far-reaching significance in the comprehensive development of students. However, it is worth noting that the mechanisms through which “institutional optimization” and “cultural education” function are still insufficiently differentiated in existing research. For instance, the point-based incentive systems used in U.S. colleges tend to focus on behavioral motivation, while Chinese colleges often emphasize cultural immersion and value internalization. The contextual boundaries of these approaches across different cultural environments have not been fully explored. Future research should strengthen cross-cultural comparative studies to avoid equating “community participation” directly with “moral improvement,” and instead provide more nuanced interpretations.

3.2. Intellectual education

In the realm of intellectual education, both domestic and international research has focused on how the collegiate system leverages general education, the tutorial system, and interdisciplinary exchange to effectively enhance students' academic and innovative capabilities.

Gui et al., through rigorous empirical research, revealed that the collegiate model significantly narrows the academic achievement gap among students from different socioeconomic status (SES) backgrounds, highlighting its positive role in promoting educational equity [13–14]. Luo et al. employed structural equation modeling (SEM) to analyze how collegiate activities influence students' sense of belonging, academic engagement, and academic achievement. Their findings show that such activities indirectly improve academic outcomes by enhancing students' sense of belonging and academic involvement [15]. Jessup-Anger, using a hierarchical linear model (HLM), explored how liberal education experiences within colleges—characterized by high-quality faculty-student interaction, academic challenge, and high expectations—affect students' learning orientation and lifelong learning capacity. The results demonstrated significant positive effects on students' learning motivation and sustainable development abilities [16]. Collectively, these empirical studies support the hypothesis that the collegiate system effectively enhances students' academic performance and innovative potential.

In China, Zhou Yi and colleagues conducted empirical analyses on how interdisciplinary training models under the collegiate system contribute to cultivating top innovative talents. Their study found that students in such programs outperformed their peers in academic performance, English proficiency, foundational disciplinary knowledge, learning capacity, and global perspective [17]. Liu Haiyan et al. emphasized that the collegiate system fosters students' “learning agency”—including proactive learning, active participation in the learning process, and the ability to take ownership of their education—through general education and faculty-student interaction [18]. Zhang Jianyue and others pointed out that the collegiate model enhances students' scientific literacy and innovative thinking by optimizing both curricular and extracurricular learning activities [19]. Li Zheng et al. further noted that general education and informal learning within the collegiate system expand students' multidisciplinary knowledge and interdisciplinary competence, laying a strong foundation for cultivating globally minded and leadership-oriented talent [20]. Gao Hang and colleagues introduced the innovative concept of a “ubiquitous” informal learning model, which reconstructs educational processes to achieve personalized learning goals. This approach effectively cultivates students' independent learning abilities, engineering practice skills, and innovation and entrepreneurship competencies, offering new perspectives and paths for intellectual education within the collegiate model [21].

3.3. Physical education

In the area of physical education, the collegiate system also plays a vital role in promoting students' physical and mental well-being. Thériault et al. conducted an in-depth analysis of how university students' residential arrangements impact their health-related self-efficacy across multiple dimensions, including nutrition, physical activity, mental health, and sleep [22]. Their findings indicated that students living on campus displayed the highest levels of health self-efficacy, followed by those living off-campus with their parents, while those living alone off-campus had the lowest levels.

In Chinese scholarship, Chen Xiaobin explicitly noted that recent reforms in the collegiate system have prioritized students' physical and psychological health, emphasizing the cultivation of “health awareness.” He proposed that students should acquire at least one sport skill and develop lifelong exercise habits. This philosophy aims to enhance students' physical fitness through sports activities and to promote their holistic development [2].

3.4. Aesthetic education

Research in aesthetic education primarily focuses on how the collegiate system promotes students' aesthetic appreciation and humanistic literacy through cultural activities and arts education. DeLauer et al., via detailed surveys and focus group discussions, found that incorporating natural environments and biophilic design significantly alleviated students' psychological stress and improved overall well-being [23]. Brownell et al., through the innovative design of cross-curricular assignments, explored how sound can reflect the ecological and cultural characteristics of a community. Their study not only expanded the boundaries of aesthetic education but also revealed the immense potential of sound-based creation as a tool in aesthetic practice [24].

Domestically, Wu Wei and colleagues focused on teacher education students and implemented a variety of liberal and general education programs to cultivate their humanistic sensibilities and aesthetic tastes. They emphasized that by guiding students to engage deeply with the unique charm of traditional and Shanghai-style culture, the programs effectively enhanced their cultural literacy and refined their aesthetic sensibilities, thus laying a solid foundation for their comprehensive development [25].

3.5. Labor education

Although research on labor education remains relatively scarce both domestically and internationally, this may be attributed to various complex factors such as the ambiguous positioning of labor education within education systems, methodological limitations, and challenges in data collection. Nonetheless, at the practical level within universities, the collegiate system has opened effective pathways for cultivating labor values and social responsibility through well-designed community service and labor practice programs. For instance, Mukhopadhyay et al. offered a profound exploration of a collegiate labor education initiative at an Asian undergraduate institution. Through meaningful community engagement activities—such as caring for the elderly and supporting migrant workers—the program significantly enhanced students' civic consciousness and sense of social responsibility. Moreover, it effectively developed their empathy and cross-cultural communication skills, infusing labor education with renewed vitality and relevance [26].

4. Research challenges and controversies

Although the collegiate system has demonstrated certain achievements in moral, intellectual, aesthetic, physical, and labor education, current research still faces numerous challenges and controversies that significantly hinder a comprehensive understanding of its educational effectiveness.

First, in terms of research design, existing studies are predominantly concentrated on a limited number of elite universities, with insufficient attention paid to a broader spectrum of institutions and academic disciplines. This limitation makes it difficult to assess the applicability and effectiveness of the collegiate system across diverse educational contexts. For instance, different types of institutions—such as research universities, application-oriented universities, and vocational colleges—differ significantly in terms of resource allocation, student demographics, and educational objectives. However, current research has yet to fully reflect these differences, thus making systematic comparisons and generalizations about the effectiveness of the collegiate model across institutional types problematic.

Second, with regard to methodological approaches, the divergence between Chinese and Western studies essentially reflects different academic traditions. Western research, influenced by behaviorist psychology, tends to quantify the impact of collegiate activities on moral judgment through randomized controlled trials (RCTs), while Chinese studies, rooted in the humanistic tradition of educational sociology, often rely on qualitative methods such as grounded theory to extract educational mechanisms. This methodological divide hinders meaningful dialogue between the two bodies of literature and underscores the need for an integrated analytical framework that combines quantitative evidence with qualitative insights. While qualitative research can reveal in-depth mechanisms and contextualized student experiences within the collegiate system, its lack of quantitative data limits its capacity to precisely assess effectiveness and scale up findings. For example, in evaluating the system's impact on measurable outcomes such as academic performance or innovation capacity, the absence of quantitative analysis can result in subjective and limited conclusions, offering little robust evidence for policy-making or practical reform.

Third, in terms of research content, existing studies disproportionately focus on intellectual and moral education, with relatively little attention given to physical, aesthetic, and labor education. This imbalance hampers a holistic understanding of the collegiate system's role in fostering students' all-around development.

Finally, from an argumentative standpoint, much of the existing research emphasizes short-term outcomes while overlooking long-term impacts. Although studies of short-term effects can rapidly demonstrate the initial benefits of collegiate practices, they fail to capture the long-range influence on students' future development. For example, the long-term effects of the collegiate system on fostering students' sense of social responsibility, civic awareness, and innovative thinking remain underexplored. This

neglect of longitudinal perspectives may lead to a fragmented understanding of the system's educational value, ultimately hindering an accurate assessment of its contribution to students' lifelong learning and personal growth.

5. Conclusion and future directions

In summary, the collegiate system—through mechanisms such as community engagement, faculty mentorship, general education, cultural activities, and labor practices—has demonstrated its potential to promote students' holistic development across moral, intellectual, physical, aesthetic, and labor-related dimensions. However, current research remains limited by several critical shortcomings, including narrow research designs, a lack of methodological diversity, imbalanced research content, and a predominant focus on short-term effects. These limitations hinder a comprehensive understanding of the system's educational impact but also point the way for future scholarly inquiry.

Looking ahead, future research should address these gaps in several key areas: **Research Design:** Expand sample sizes and institutional diversity to include a broader range of universities and disciplinary contexts. This will allow for a more comprehensive evaluation of the applicability and effectiveness of the collegiate system across varied educational environments. **Methodological Approaches:** Strengthen quantitative analyses while integrating qualitative insights to provide a more holistic and robust assessment of educational outcomes. Combining empirical rigor with contextual depth will enhance the credibility and applicability of findings. **Research Scope:** Address the current imbalance by incorporating more studies on physical education, aesthetic development, and labor education. This will ensure a fuller evaluation of the system's impact on all aspects of student development. **Analytical Perspective:** Move beyond short-term outcome evaluations to explore the long-term effects of the collegiate system on students' future trajectories, including career development, civic engagement, and lifelong learning capacities.

By advancing research along these directions, future studies will be better positioned to assess the educational impact of the collegiate system more comprehensively. This will help overcome current limitations, offering stronger theoretical foundations and practical guidance for the system's further development. Ultimately, such research will contribute to the broader implementation of the collegiate model in higher education and support the realization of national goals for educational excellence and talent cultivation.

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