

Between Borrowing and Embedding: The Institutionalization of French Educational Models in China

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Article

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Abstract

This research employs a historical institutionalist lens to examine the evolution and structural dynamics of Sino-French cooperative education in higher education. Through a mixed-methods design integrating historical analysis, policy review, and quantitative data, the research traces three developmental phases shaped by critical junctures in policy and bilateral relations. Findings reveal a structurally concentrated system dominated by elite partnerships in engineering and coastal regions, reflecting strategic alignment with national STEM priorities but also highlighting tensions in equity, systemic integration, and pedagogical adaptation. The study contributes theoretically by demonstrating the path-dependent nature of transnational educational cooperation and the complex localization of foreign models. It offers practical insights for policymakers seeking to balance strategic alignment with sustainable and inclusive partnership design.

1. Introduction

Sino-French cooperation in running schools, as a significant modality of educational internationalization, represents a complex interplay of policy directives, institutional strategies, and cross-cultural academic exchange. Its evolution is not merely a linear progression of educational collaboration but a reflection of broader socio-political and economic transformations in both China and the international arena. This paper uses a historical institutionalist framework to analyze the development of Sino-French cooperation in running schools, positing that its path is characterized by critical junctures, periods of significant policy change, that have shaped its institutional forms, structural features, and functional priorities.¹ By tracing its trajectory from embryonic beginnings to its current state, this study aims to uncover the mechanisms through which national policies, bilateral relations, and global trends have influenced this specific form of transnational education.

The analysis is grounded in a triangulation of methods: historical documentation, policy text analysis, and empirical data on the current landscape of Sino-French cooperative institutions and programs. This approach allows for an examination of both the macro-level policy drivers and the micro-level institutional realities, providing a comprehensive understanding of its achievements, persistent challenges, and future prospects. The relevance of this study extends beyond the Sino-French context, offering insights into the dynamics of international educational partnerships, particularly those involving distinct educational philosophies and systems, and their role in national development strategies.

2. Literature Review

2.1 Theoretical Frameworks for International Educational Cooperation

The study of international educational cooperation has been approached through multiple theoretical lenses. The historical institutionalism framework, as applied in this study, emphasizes the role of path

dependency and critical junctures in shaping institutional development.² This perspective helps explain why Sino-French cooperative education has evolved along specific trajectories rather than others, and how past policy choices continue to constrain or enable current options.

Comparative education scholars have long emphasized the importance of understanding educational systems within their broader socio-political contexts.³ The concept of "policy borrowing"⁴ provides insights into how educational models are transferred across national boundaries, often undergoing significant adaptation in the process. In the case of Sino-French cooperation, this framework helps illuminate how French educational models have been selectively adopted and modified to fit Chinese contexts.

From a policy analysis perspective, the policy cycle model⁵ offers a structured approach to understanding how educational policies are formulated, implemented, and evaluated. This framework is particularly relevant for analyzing the evolution of Sino-French cooperative education policies over time, from the initial exploratory phase to the current quality enhancement stage.

2.2 Research on Sino-Foreign Cooperation in Running Schools

Existing research on Sino-foreign cooperation in running schools has primarily focused on several key themes. First, studies have examined the policy evolution and regulatory framework governing these partnerships.⁶ These works highlight how China's approach to educational internationalization has shifted from cautious opening to strategic engagement, with Sino-foreign cooperative education serving as a key mechanism for introducing foreign educational resources.

Second, research has explored the institutional models and governance structures of cooperative education programs.⁷ These studies document the emergence of various partnership models, from independent legal entities to embedded programs within existing universities, each with distinct advantages and challenges.

Third, scholars have investigated the quality assurance mechanisms and accreditation systems for Sino-foreign cooperative education.⁸ This body of work emphasizes the tensions between maintaining international standards and adapting to local contexts, as well as the challenges of ensuring educational quality across different cultural and institutional settings.

Fourth, research has examined the outcomes and impacts of Sino-foreign cooperative education, including student learning experiences, graduate employability, and institutional capacity building.⁹ These studies generally report positive outcomes but also highlight challenges related to cultural adaptation, language barriers, and the integration of different educational philosophies.

2.3 Research Gaps and Contributions

Despite the growing body of literature on Sino-foreign cooperative education, several significant gaps remain. First, most studies have adopted a broad perspective, examining Sino-foreign cooperation in general rather than focusing on specific bilateral partnerships. This study addresses this gap by providing a detailed analysis of Sino-French cooperation, which has distinctive characteristics due to the unique features of the French higher education system and the historical depth of Sino-French educational relations.

Second, existing research has often been descriptive rather than analytical, focusing on documenting the development of cooperative education rather than explaining its underlying dynamics. This study contributes to the literature by employing a historical institutionalist framework to analyze the path-dependent nature of Sino-French cooperative education and the critical junctures that have shaped its development.

Third, while there is substantial research on the policy and institutional aspects of Sino-foreign cooperative education, less attention has been paid to the structural characteristics and operational challenges at the program level. This study addresses this gap by examining the scale, disciplinary distribution, geographical patterns, and partnership models of Sino-French cooperative education, providing insights into its current state and future prospects.

Fourth, the literature has often treated Sino-foreign cooperative education as a homogeneous phenomenon, overlooking the significant variations across different partnership models and disciplinary fields. This study contributes to a more nuanced understanding by examining the specific characteristics of Sino-French cooperation in different disciplinary areas and institutional contexts.

3. Methodology

3.1 Research Design

This study employs a mixed-methods research design that combines historical analysis, policy document analysis, and quantitative data analysis. The mixed-methods approach allows for triangulation of findings and provides a more comprehensive understanding of the complex phenomenon of Sino-French cooperative education.¹⁰ The historical analysis traces the evolution of Sino-French educational cooperation over time, identifying key turning points and policy shifts. The policy document analysis examines the regulatory framework and policy discourse surrounding Sino-French cooperative education. The quantitative data analysis provides insights into the current structural characteristics of Sino-French cooperative institutions and programs.

3.2 Data Collection

The study draws on multiple sources of data to ensure validity and reliability. First, historical data were collected from archival sources, including government documents, university records, and historical

accounts of Sino-French educational exchanges. These sources provide insights into the early development of Sino-French cooperative education and its evolution over time.

Second, policy documents were collected from various sources, including the Ministry of Education of China, the Chinese State Council, and relevant French educational authorities. These documents include laws, regulations, policy guidelines, and official reports related to Sino-foreign cooperative education. The collection covers the period from the early 1980s to the present, allowing for a comprehensive analysis of policy evolution.

Third, quantitative data on Sino-French cooperative institutions and programs were collected from the official database of the Ministry of Education of China. These data include information on the number of institutions and programs, their geographical distribution, disciplinary focus, enrollment numbers, and partnership models. The data were collected for the period up to the end of 2025, providing a comprehensive picture of the current state of Sino-French cooperative education.

Fourth, supplementary data were collected from secondary sources, including academic publications, institutional reports, and media coverage. These sources provide additional insights into the operational realities and challenges of Sino-French cooperative education.

3.3 Data Analysis

The data were analyzed using a combination of qualitative and quantitative methods. The historical data were analyzed using historical narrative analysis, which involves constructing a chronological account of events while identifying patterns, turning points, and causal relationships.¹¹ This approach allows for an understanding of how Sino-French cooperative education has evolved over time and how historical events and policy decisions have shaped its development.

The policy documents were analyzed using content analysis and discourse analysis. Content analysis involves systematically coding and categorizing the content of policy documents to identify key themes, policy priorities, and changes over time.¹² Discourse analysis examines the language and rhetoric used in policy documents to understand how Sino-French cooperative education is framed and legitimized.¹³ This approach helps reveal the underlying assumptions, values, and power relations embedded in policy discourse.

The quantitative data were analyzed using descriptive statistics, including frequency distributions, cross-tabulations, and measures of central tendency and dispersion. These analyses provide insights into the structural characteristics of Sino-French cooperative education, such as its scale, disciplinary distribution, geographical patterns, and partnership models. The quantitative analysis also includes trend analysis to examine changes over time.

3.4 Ethical Considerations

This study adheres to ethical principles in research. All data were collected from publicly available sources, and appropriate measures were taken to ensure the accuracy and reliability of the information. When using secondary data, proper attribution was given to the original sources. The study maintains objectivity and avoids any conflicts of interest.

3.5. Limitations

Several limitations should be noted. First, the study relies primarily on official data and documents, which may present a more positive picture of Sino-French cooperative education than the actual reality. Second, the quantitative data provide information on the structural characteristics of cooperative education but do not capture the qualitative aspects, such as educational quality, student experiences, and institutional challenges. Third, the study focuses on the Chinese perspective, with limited access to French policy documents and institutional perspectives. Future research could address these limitations by incorporating more diverse data sources and perspectives.

4. Findings

4.1. Historical Trajectory of Sino-French Cooperative Education

The development of Sino-French cooperative education can be delineated into three major phases, each marked by distinct historical contexts and policy orientations.

4.1.1. Emergence and Exploration in the Modern Era (Early 20th Century – 1949)

The inception of Sino-foreign cooperative education in China was deeply influenced by the late Qing and Republican-era ethos of “Chinese learning as the fundamental structure, Western learning for practical use” (Zhongxue weiti, Xixue weiyong, 中学为体, 西学为用). This period witnessed the emergence of two parallel strands of Sino-French collaboration: religious and secular.

The religious strand was epitomized by the Catholic Université l’Aurore (Zhendan Daxue, 震旦大学), founded in Shanghai in 1903 by the French Jesuit missionary Joseph Ma Xiangbo. Initially established with the aim of fostering modern education for national salvation, it was later fully administered by the French Jesuits after 1905. While serving as an important stronghold for spreading French culture, the university demonstrated a degree of cultural accommodation by respecting Chinese traditions, upholding freedom of belief, and excluding religious instruction from its formal curriculum. Modeled on the French system, it offered prépa and undergraduate programs in arts and sciences, later expanding to include faculties of medicine, law, and engineering. It began enrolling postgraduate students in 1914. Instruction was primarily in French, with mandatory courses in both Chinese and French literature. The faculty was diverse, with Chinese teachers constituting about two-thirds of the staff, and non-Catholic students

making up approximately three-quarters of the students, underscoring its cooperative nature. Supported by both Chinese and French governments, the university boasted excellent libraries, museums, and sports facilities, with a favorable student-teacher ratio of about 5:1. It produced a cohort of distinguished alumni, such as Yu Youren(俞 允)and Weng Wenhao(翁 文灏), who made significant contributions in politics, medicine, law, and academia, establishing itself as an early exemplar of Sino-French educational cooperation.

Concurrently, a secular model emerged with the establishment of the Sino-French University (Zhong-Fa Daxue, 中法大学) in 1920. This initiative was jointly prepared by Peking University, Guangdong University, and the University of Lyon in France. It comprised branches in Beijing, Guangzhou, and Lyon, implementing a transnational segmented training model. The Chinese campuses were responsible for student recruitment and the first two years of undergraduate study, while the Lyon branch handled the latter two years and postgraduate education, aiming to cultivate scholars engaged in advanced academic research. The establishment of this university aligned with France's goal of expanding its influence in China through educational outreach, while also addressing China's need to leverage foreign expertise for talent development, educational modernization, and facilitating the return of the Boxer Indemnity funds. In terms of governance, the Sino-French University exhibited significant Chinese agency, with Chinese nationals serving as presidents of both the Beijing and Lyon branches, and a jointly constituted board of directors, distinguishing it from other foreign-led initiatives of the time. Beijing Sino-French University possessed superior resources, including a library of 65,000 volumes and scientific instruments valued at over 55,000 silver dollars, and employed renowned Chinese and foreign scholars like Liu Bannong(刘 半农)and Qian Xuantong(钱 玄同). It placed a strong emphasis on research, housing institutes for radiology and pharmacology, which attracted prominent scientists like Zheng Dazhang(郑 大章)and Qian Sanqiang(钱 三强), contributing to the foundation of China's modern scientific research system. The Lyon branch, while not having independent faculties, provided its students access to courses at the University of Lyon, nurturing talents such as the artist Chang Shu-hung(常 书鸿)and the poet Dai Wangshu(戴 望舒). Both campuses established academic societies and publications, effectively promoting Sino-French cultural and academic exchange.

The founding of the People's Republic of China in 1949 marked a critical juncture. The new government initiated a comprehensive overhaul of the education system, guided by the principles outlined in the Common Program of the Chinese People's Political Consultative Conference. Beginning in 1950, the state began to take over all higher education institutions receiving foreign subsidies. By the end of 1951, all 20 such institutions, including Université l'Aurore, had been converted into privately-run institutions supported by the government, with their religious affiliations and foreign management structures completely removed. The subsequent nationwide reorganization of colleges and departments in 1952, modeled on the USSR system, led to the absorption of these private universities into newly configured public institutions. Université l'Aurore's faculties were dispersed, its College of Arts and Economics Department were merged into Fudan University; its Mechanical, Electrical, and Naval Architecture engineering departments into Jiao Tong University; its Civil Engineering department into Tongji University; and other departments into various specialized institutes. All these universities are now top

university in China nowadays. The Beijing Sino-French University was closed in June 1950, with its departments integrated into Peking University, Nankai University, and others. The Lyon branch had ceased operations after 1946 due to the impacts of World War II, financial constraints, and occupation of its premises. Subsequently, the *Learn from the Soviet Union* policy and the Cultural Revolution led to a prolonged hiatus in Sino-French cooperative education.

4.1.2. Revival and Institutionalization in the Reform and Opening-Up Era (1978 – early 2000s)

The policy shift following Deng Xiaopin's rise to power and the launch of reform and opening-up in 1978 created a new environment for educational internationalization. Deng's directive for education to *be oriented towards modernization, towards the world, and towards the future* catalyzed institutionalized exploration of higher education exchanges. A pivotal early step was the 1979 Sino-French Cultural Exchange Plan for 1980–1981, which explicitly supported strengthened cooperation between Wuhan University and France in natural sciences, especially mathematics. This led to the creation of the *Sino-French Mathematics Pilot Class* at Wuhan University in 1980. As described by Liu Daoyu(刘道渝), then Executive Vice-President of Wuhan University, this five-year program aimed to reform the mathematics teaching system by drawing on French experience. The French side provided professors for short-term teaching and research collaborations, as well as syllabi and textbooks. Over eight intakes, the program produced 223 students, a quarter of whom pursued doctoral studies in France, including distinguished mathematicians such as Wu Liming(吴黎明), demonstrating the potential of cooperation for cultivating high-level talent.

The legal foundation for non-state involvement in education was laid with the 1982 revision of the Constitution, which encouraged collective economic organizations, state enterprises and institutions, and other social forces to conduct educational endeavors according to law. The 1985 *Decision on the Reform of the Education System* by the CPC Central Committee explicitly called for strengthening international exchanges and, crucially, *allowing foreign institutions and groups to run schools in China... under the premise of abiding by state laws and safeguarding national interests*. Throughout the 1980s and early 1990s, the Ministry of Education issued policies facilitating institutional exchanges, visiting professorships, and cooperative projects. Within this framework, Sino-French cooperation expanded, including projects like the Sino-French Senior Training Center for Enterprise Management Executives established by Nankai University and the French Committee for Education in 1988, and the Shanghai French Training Center set up by Shanghai Hongkou District Spare-Time University(educational institution for adult education) and the Alliance Française in Shanghai in 1991.

The end of the Cold War and the Soviet Union's dissolution in 1991 initially prompted caution. However, the 1992 14th CPC National Congress reaffirmed the commitment to accelerate reform and opening-up, emphasizing the necessity of absorbing advanced world civilizations, which reinvigorated educational openness. In January 1993, the State Council formulated a concise guiding principle for Sino-foreign cooperative education: *Keep the initiative in our own hands and make foreign things serve China, Dare to*

explore and dare to experiment. This was operationalized in June 1993 by the State Education Commission's (SEC) *Notice on the Issue of Overseas Institutions and Individuals Conducting Cooperative Education in China*. This landmark document provided the first systematic definition, principles, and management framework for cooperative education. It defined the activity, stipulated that it must not be profit-oriented, and outlined procedures for application, approval, management, and supervision. A significant milestone was reached in 1995 with the promulgation of the *Provisional Regulations on Sino-Foreign Cooperation in Running Schools*, which for the first time granted cooperative education formal status as a supplement to China's education system through local rules, enhancing its normative standing. The same year, the Education Law of the People's Republic of China established the principles of *independence, equality, mutual benefit, mutual respect* for educational exchanges and cooperation, further solidifying its legal basis.

China's accession to the World Trade Organization (WTO) in December 2001 was another critical juncture. To fulfill commitments under the General Agreement on Trade in Services (GATS) while safeguarding educational sovereignty, China clarified that approved cooperative education services would primarily take the form of *contractual joint institutions*, distinct from commercial joint ventures, and accelerated relevant legislation. The result was the enactment of the Regulations of the People's Republic of China on Chinese-Foreign Cooperation in Running Schools in 2003. This seminal administrative regulation explicitly defined Chinese-foreign cooperation in running schools as an integral part of China's education system, established the guiding principle of expanding opening up, standardizing school operations, managing according to law, and promoting development, and provided detailed provisions on institutional approval, curriculum, quality assurance, and degree conferral. It notably encouraged cooperation in higher education and permitted the establishment of non-independent legal entity institutions (e.g., colleges within a university), creating new institutional space. Subsequent measures, including the *Implementing Measures for the Regulations on Chinese-Foreign Cooperation in Running Schools* (2004), and several policy opinions and notices issued by the Ministry of Education between 2006 and 2009, progressively built a comprehensive regulatory system covering approval, evaluation, certification, and exit mechanisms, steering cooperation from quantitative expansion towards qualitative improvement.

Within this evolving policy environment, Sino-French cooperative education experienced rapid development and structural optimization. In 1996, the *Nanchang University - Université de Poitiers International Business Management Master's Program* became the first continuously operating Sino-French project approved under the new regulatory regime. A significant qualitative leap occurred in 2006 with the establishment of Centrale Pékin by Beihang University and the French Écoles Centrales group, which introduced the prestigious French "ingénieur généraliste" educational model, pioneering a new form of engineering-focused cooperative institution. This was followed by the creation of several other prominent institutions, such as the Sino-European Engineering School of Shanghai University (2006), the ParisTech Excellence in Engineering School at Shanghai Jiao Tong University (2012), and the Sino-European Institute of Aviation Engineering at Civil Aviation University of China (2007). These initiatives

demonstrated a clear alignment with national strategies for industrialization and technological advancement.

4.1.3. Quality Enhancement and Strategic Expansion in the New Era (2010 – Present)

The promulgation of the *National Medium- and Long-Term Education Reform and Development Plan Outline (2010–2020)* (NMLP) marked the beginning of a phase focused on quality enhancement. The NMLP identified expanding educational openness as a key component of reform and listed running a number of model Sino-foreign cooperative schools and a batch of cooperative programs as a major initiative, emphasizing the cultivation of high-level internationalized talent. Following the 18th CPC National Congress, policy emphasis shifted further towards improvement of quality assurance mechanisms and optimization of transformation of evaluation, with a great emphasis on ensuring that high-quality resources introduced from abroad are truly absorbed, digested and utilized. The 2016 *Several Opinions on promoting the Opening-Up of Education in the New Era*, issued by the General Office of the CPC Central Committee and the State Council, called for enhancing the level of foreign-related schooling, with a focus on introducing foreign quality educational resources in natural science and engineering disciplines urgently needed by the country to improve the overall quality of cooperation. This policy explicitly linked cooperative education to national disciplinary development layouts and the demand for sci-tech innovation talent, integrating it into the *13th Five-Year Plan* for economic growth and industrial upgrading. The 2020 *Opinions on Accelerating and Expanding Education Opening-Up in the New Era* by the Ministry of Education and seven other ministries reaffirmed Chinese-foreign cooperation in running schools as a key vehicle for educational opening-up, crucial for diversifying educational opportunities and optimizing resource supply. The 2024 CPC Central Committee Decision on *Further Comprehensively Deepening Reforms and Advancing Chinese Modernization* further encouraged world-class universities in science and engineering to run schools in China, underscoring its strategic positioning in serving national modernization and industrial upgrading.

Guided by this policy package, Sino-French cooperation has expanded significantly in the number of institutions and programs, disciplinary scope, educational levels, and geographical distribution. Participating French institutions now include world-class universities like PSL University and Sorbonne University. Disciplines have broadened from the initial focus on management and engineering to include science, medicine, arts, and interdisciplinary fields, with emerging programs in fintech, AI and big data management, and biomedical engineering. The educational level has extended upwards, with the appearance of doctoral programs (e.g., the Medical Education Professional Doctorate program between Shanghai Jiao Tong University and Université de Strasbourg, approved in 2013) and cooperative institutions encompassing doctoral training (e.g., the Southeast University - University of Rennes Graduate School, approved in 2017). Geographically, cooperation has diffused from core cities like Beijing, Shanghai, and Tianjin towards central, western, and local universities, such as Zhejiang Sci-Tech University, Henan Normal University, and Guilin University of Electronic Technology, making Sino-French collaboration more responsive to regional economic and social development needs.

In summary, the historical trajectory of Sino-French cooperative education, from its dualistic origins in the modern era, through interruption and transformation post-1949, to revival and institutionalization after 1978, and finally to quality-focused expansion in the 21st century, demonstrates a path dependency deeply intertwined with China's societal transformations and internationalization strategies. Under the guidance of head-of-state diplomacy, it is steadily developing towards higher levels, broader fields, and greater standardization, becoming a demonstrative component of China's international educational cooperation.

4.2 Structural Characteristics of Current Sino-French Cooperative Education

Since the mid-1990s, Sino-French cooperative education has developed into a sizable and structurally defined system. By the end of 2025, there were 78 institutions and programs at the undergraduate level and above (26 institutions and 52 programs), approved by the Ministry of Education in China. Analyzing their structural features offers insights for optimizing broader policies and practices.

4.2.1 Scale Expansion and Policy Responsiveness

The growth in the number of Sino-French cooperative entities exhibits clear policy responsiveness and phased progression. The approval of the first program in 1996 marked the formal start under a regulated framework. The establishment of the first institution in 2006 signaled an upgrade from project-based to entity-based, institutionalized cooperation. Peaks in approvals correlate strongly with key policy milestones or the deepening of bilateral relations, such as after the establishment of the Sino-French High-Level People-to-People Dialogue Mechanism in 2013–2014, and following reciprocal head-of-state visits in 2023 and 2024.

Among the 26 institutions, 24 offer undergraduate degrees, 21 offer master's degrees, and 2 offer doctoral degrees, with approximately 81% covering postgraduate education. Of the 52 programs, 27 are at the undergraduate level, 23 at the master's level, and 2 at the doctoral level, with about 48% encompassing postgraduate education. This indicates that cooperative institutions generally operate at higher academic levels compared to programs.

The total enrolled student population reached approximately 32,000 by the end of 2025. Growth in program enrollment generally mirrors the trend in program approvals, with significant increases during periods of policy support. Some programs enroll over 100 students annually, demonstrating their role in meeting social demand. Among institutions, about 58% have enrollments exceeding 1,000 students, with large entities like the Sino-French College of Renmin University of China serving as benchmark projects. Smaller institutions, however, often possess distinct characteristics, focusing on high-level postgraduate training or niche specializations (e.g., Southeast University - University of Rennes Graduate School, China Academy of Art - Nantes Atlantic Design Joint College).

4.2.2 Disciplinary Distribution: Policy Adaptation and Structural Optimization

The disciplinary distribution reflects a tripartite logic: serving national educational development strategy, leveraging French strengths, and responding to market demand. Engineering disciplines dominate, accounting for 51.7% of all offerings, followed by management at 20.7%, with arts, economics, and science comprising the remainder. This structure is driven by national policies encouraging STEM cooperation and the high quality and distinctive nature of French engineering education (particularly from the Grandes Écoles system). The disciplinary mix is continuously optimizing: the proportion of management programs is gradually decreasing, while engineering's share is rising, and new interdisciplinary programs in AI, big data, and fintech are being added. However, notable gaps remain, with no cooperation in agriculture and low representation in basic sciences and medicine—fields where French higher education also excels. Despite the overall decline, the restant of management programs is still substantial, with some signs of duplication, reflecting short-term planning and market convergence that may limit the strategic contribution of cooperative education to the national disciplinary ecosystem in the long run.

4.2.3 Geographical Distribution: Agglomeration Effects and Imbalances

We could characterize the geographical distribution like “Concentrated in the east coast, with only a few scattered ‘dots’ in the central and western areas”. Cooperation is approved in 20 provinces, but nearly half of all institutions and programs are concentrated in Zhejiang, Shanghai, and Beijing. Zhejiang leads in the number of institutions, driven by active participation from local universities and industrial demand. Shanghai benefits from its early openness and internationalized base, boasting a rich concentration of projects. This agglomeration aligns with principles of efficiency, correlating with regional economic development, international connectivity, density of higher education resources, and local policy support. However, from the perspectives of educational equity and regional coordinated development, this imbalance exacerbates inter-regional disparities in higher education resources. While central and western provinces like Hubei, Sichuan, and Shaanxi have approved projects, institutional presence is scarce, and project types are limited, hindering the formation of sustainable collaborative strength. Relying solely on market mechanisms is insufficient to achieve regional balance, even though cooperative school running is envisioned as a tool to address resource shortages.

4.2.4 Partnership Models: Prevalence of Collaboration between elite universities

Sino-French cooperative education is characterized by a partnership between top-tier institutions, with high-level universities as the primary participants. Among the Chinese partners in cooperative institutions, over 60% are universities affiliated with the “985 Project” “211 Project” or “Double First-

Class” initiative. French partners are more diverse. In institutions, the largest share of French partners are engineering Grandes Écoles (approx. 42%), followed by comprehensive universities (e.g., Université Paris Cité) and other specialized Grandes Écoles. Among the 52 programs, 24 involve French comprehensive universities as partners, and 27 involve French “Grandes Écoles”. This partnership pattern is influenced by institutional resource-acquisition capacity and reputation. Recently, there has been a gradual increase in participation by ordinary local universities, indicating a trend towards broader engagement and closer integration with local industries.

4.3 Achievements and Key Challenges

Sino-French cooperative education has achieved significant scale and demonstrates positive trends in structural optimization. Its evolution reflects the broader shift in China’s educational opening-up from quantitative expansion to qualitative improvement, and from generalized collaboration to strategic focus.

4.3.1 Demonstrated Effectiveness and Model Value

The flagship institutions like the Centrale Pékin in Beihang University and the ParisTech Excellence in Engineering School at Shanghai Jiao Tong University have successfully imported the French “Generalist Engineer” educational model, emphasizing strong foundational knowledge in mathematics and science, close industry-academia collaboration, and intensive practical training. This has produced a cohort of engineering talents with international perspectives and mastery of cutting-edge technologies, effectively supporting national strategies like Manufacturing Power and Innovation-Driven Development.

In disciplinary development, Sino-French cooperation has pioneered collaborations in French strengths and emerging interdisciplinary fields such as art and design, nuclear engineering, aerospace, and clean energy. These initiatives have helped fill gaps in the cultivation of high-level internationalized talent in certain domestic fields and stimulated innovation in related disciplines at Chinese partner universities. Programs generally emphasize French language proficiency and cross-cultural understanding, producing graduates who are not only professionally competent but also serve as crucial bridges for Sino-French economic, scientific, and cultural exchange, with the scale effect of this talent reservoir becoming increasingly apparent.

Joint research has also seen breakthroughs. Many cooperative institutions have established joint labs or research centers leveraging the strengths of both sides. For instance, Centrale Pékin in Beihang University has set up joint experimental platforms focused on carbon neutrality. Collaborative research, joint grant applications, and co-authored publications enhance the original innovation capacity of both parties and contribute directly to regional development, such as in the Yangtze River Delta and Guangdong-Hong Kong-Macao Greater Bay Area, by supporting technological upgrading in local industries.

In governance and institutional integration, Sino-French cooperation has provided valuable experimentation. The infusion of French elite education models has created a positive “pressure effect”

on Chinese partners, prompting reforms in faculty evaluation, student assessment, academic management, and quality assurance. For example, the Renmin University Sino-French College implemented an orientation system, where students failing two courses or maintaining a GPA below 3.0 lose the opportunity to study in France and receive only the Chinese degree, and those failing to achieve C1 level in French do not receive the French degree. While facing challenges of cultural adaptation, such practices offer important references for refining academic evaluation systems in China. Explorations in curriculum integration, textbook selection, faculty development, and student support mechanisms provide “stress tests” and lessons for the internationalization of Chinese higher education governance.

4.3.2 Persistent Challenges and Systemic Constraints

Despite progress, Sino-French cooperative education faces structural, systemic challenges and institutional misalignments.

First, fundamental differences exist between the two educational systems. French elite education in engineering and business, rooted in the Grande École system, is characterized by small scale, low student-faculty ratios, highly individualized training, rigorous selection, and process-based elimination, coupled with deep industry integration. In this model, quality is often perceived as being in tension with scale. In contrast, Chinese higher education is in a phase of massification, bearing multiple missions including serving national strategy, promoting social mobility, and meeting diverse social needs. Cooperative education is often expected to deliver on introducing quality resources, enhancing institutional vitality, and serving regional development, where economies of scale are often a practical necessity for sustainability and broad impact. Interviews with directors of established engineer programs reveal French partners' concerns about the recruitment scales set by Chinese sides, worrying about potential dilution of their brand reputation. Furthermore, French institutions, with faculty, labs, and administrative resources configured for small-scale elite education, often struggle to accommodate large cohorts of Chinese students for study abroad phases.

Second, the tension between “selective outlet” (strict graduation requirements) and “lenient outlet” (easy graduation). Most universities in western countries, including France, often employ “easy admission and selective graduation requirements or process-based elimination mechanisms for quality control. The prevailing environment in Chinese universities, however, remains strict admission and easy graduation model making the establishment of routine academic elimination mechanisms difficult due to various resistances. Some cooperative institutions attempt to introduce the differentiation. For example, besides the Renmin University model, Centrale Pékin in Beihang University allows students struggling with the French teaching and evaluation model to transfer to a “shorter track”, which means to quit the engineer training phase (equivalent to a master's degree) and receiving only a bachelor degree upon Beihang university requirements. A very small number may transfer to other departments under specific conditions. These cases highlight the practical dilemmas in institutional adaptation.

Third, regarding quality assurance systems, France emphasizes professional field accreditation (e.g., by the Commission des titres d'ingénieur for engineering) and process evaluation. China has developed a

state-led system involving “Double First-Class” monitoring, undergraduate teaching assessments, and professional certification. Operating two parallel quality assurance systems may increase administrative burden and internal coordination costs for institutions. Pedagogically, French approaches often emphasize critical thinking, project-based learning, and debate, often without fixed textbooks, whereas Chinese institutions typically have more standardized requirements for textbook use and teaching processes, requiring ongoing runnig-in. .

Structural tensions common in Sino-foreign cooperative education also apply to the Sino-French academic cultural context, particularly regarding faculty. As scholar Lin Jinhui has noted, a dilemma exists: building a dedicated faculty for the cooperative entity might disadvantage those teachers in research output and promotion due to heavy teaching loads (especially in foundational or language courses), while over-reliance on part-time faculty from other schools within the university can lead to issues of commitment and sense of belonging, potentially affecting teaching quality stability¹⁴. Notably, faculty in the French Grandes Écoles system, particularly those in preparatory classes, are often primarily teaching-focused and may not face stringent research assessments, creating a misalignment with the prevalent “teaching-and-research” balanced evaluation system in Chinese universities.

Furthermore, day-to-day administrative operations, financial management systems, risk appetites, and decision-making efficiency require long-term on going in between partners. Representatives from both sides also note that fluctuations in the international geopolitical landscape, potentially leading to restrictions on academic exchanges, personnel mobility controls, and enhanced security reviews, introduce uncertainties regarding faculty deployment, students’ mobility, and degree recognition, posing potential challenges to the stability and mutual trust underpinning the cooperation.

5. Discussion

5.1 Theoretical Implications

The study yields several significant theoretical contributions to the scholarship on international educational cooperation. First, it affirms the utility of a historical institutionalist lens in elucidating the path-dependent evolution of Sino-French cooperative education. The analysis identifies critical junctures—such as the founding of the early cooperative institutions in the 20th century, the policy shifts of the reform and opening-up era, and China’s WTO accession—which collectively demonstrate how historical contingencies and policy decisions have forged enduring institutional trajectories that continue to influence contemporary developments. This aligns with the perspective that institutional change is not a linear process, often shaped by legacy constraints and policy choices¹⁵.

Second, this research enriches the discourse on educational policy borrowing and transfer.¹⁶ The Sino-French case reveals that the adoption of foreign educational models is seldom a direct transplant; rather, it involves selective adaptation and localization. For instance, the French Grande Ecole “Generalist Engineer” model has been significantly modified to accommodate Chinese institutional realities and

policy priorities. This adaptation involves not only technical adjustments but also deeper cultural and institutional negotiations, highlighting the complexity of educational policy transfer.

Third, the findings refine our understanding of elite universities partnerships within global higher education. The prevalence of high-level universities as partners in Sino-French cooperative education challenges the assumption that international educational partnerships are primarily driven by market forces or resource dependencies. Instead, these partnerships appear to be shaped by a combination of strategic considerations, institutional prestige, and policy directives. This suggests that theories of international educational cooperation need to account for the role of state influence and institutional strategies in shaping partnership ecosystems.

5.2 Policy Implications

The study has several important policy implications for the future governance of Sino-French cooperative education and for broader international educational collaboration.

First, the findings suggest that policy makers need to pay greater attention to the structural characteristics and operational challenges of cooperative education. While the expansion of Sino-French cooperative education has been impressive, the concentration of institutions and programs in eastern coastal regions and the dominance of engineering and management disciplines raise questions about equity and strategic alignment. Policy measures should aim to promote more balanced geographical distribution and disciplinary diversification, while also ensuring that cooperative education serves national strategic priorities.

Second, the study underscores the need to reconcile systemic disparities between the two educational regimes. The tensions between “selective outlet” and “lenient outlet” models, the misalignment of faculty evaluation systems, and the challenges of integrating quality assurance mechanisms require careful policy attention. Policy makers should consider developing more flexible regulatory frameworks that can accommodate different educational models while maintaining quality standards.

Third, attention should be directed toward the sustainability and scalability of partnership models. The current reliance on elite universities may limit broader accessibility and impact of cooperative education, particularly in less developed regions. Policy measures should encourage more diverse partnership models, including partnerships between Chinese and French institutions that focus on specific regional or sectoral needs, thereby diversifying the cooperative landscape.

5.3 Practical Implication

For practitioners involved in Sino-French cooperative education, this study provides several practical insights. First of all, successful programs establishment demands meticulous planning and institutional alignment. Challenges related to differences in educational systems, faculty evaluation, and quality assurance suggest that successful cooperation requires not only technical adjustments but also deeper institutional and cultural adaptation.

Second, cultivating sustainable partnerships hinges on mutual understanding and shared vision. Long-term success of cooperative education depends on the capacity of partners to navigate disparities in institutional cultures, governance structures, and educational philosophies. This requires ongoing dialogue, operational flexibility, and a commitment to mutual learning.

Third, the findings suggest that practitioners should prioritize educational quality and societal relevance alongside program expansion. There is a need to ensure that programs are of high quality and meet the needs of students and labor market. This requires ongoing monitoring, evaluation, and improvement of programs, as well as engagement with stakeholders to ensure relevance and impact.

5.4 Limitations and Future Research

Several limitations of the study should be acknowledged, each pointing toward fruitful avenues for further inquiry.

First, the reliance on official data and documents may reflect a more formal and potentially idealized portrayal of Sino-French cooperative education. Future research would benefit from integrating diverse qualitative data sources, including interviews with stakeholders, surveys of students and faculty, and in-depth case studies of specific institutions or programs.

Second, the study focuses on the Chinese perspective, with limited access to French policy documents and institutional perspectives. A more balanced, comparative approach examining both sides of Chinese and French partnerships would yield a more holistic understanding.

Third, the study provides a macro-level analysis of Sino-French cooperative education, but does not explore the micro-level processes. More detailed case studies based on ethnographic could illuminate the within specific programs or institutions. Further research could illuminate the everyday realities, challenges, and successes of on the ground implementation.

Fourth, the study focuses on structural and policy dimensions of Sino-French cooperative education but does not extensively examine the educational outcomes and impacts. Future research could investigate students' learning experiences, the career trajectories of graduates, and the broader societal contributions of Sino-French cooperative education.

6. Conclusion

This historical institutionalist analysis traces the trajectory of Sino-French cooperative education in higher education, framing its development within distinct evolutionary phases shaped by critical policy and geopolitical junctures. Rather than following a linear progression, this cooperation has matured through period of emergence, institutionalization, and strategic refinement: each phase reflecting and responding to broader national agendas and international dynamics.

The current state of Sino-French cooperative education is characterized by significant scale expansion, with 78 institutions and programs approved by the Ministry of Education and an enrolled student population of approximately 32,000. The structural analysis reveals a dominance of engineering disciplines (51.7%), a concentration in eastern coastal regions, and a prevalence of "elite-strong" partnerships. These characteristics reflect the alignment of Sino-French cooperative education with national strategic priorities, particularly in STEM fields and high-level talent cultivation.

In terms of impact, the collaboration has yielded significant institutional and pedagogical innovations. It has facilitated the localized adaptation of established educational models, such as the French model of formation d'ingenieur, which fostered interdisciplinary program development, and enabled substantive research co-creation. These outcomes underscore the role of such bilateral frameworks as conduits for not only talent development but also systemic learning and academic capacity-building.

Nevertheless, Sino-French cooperative education ongoing structural tensions. Divergences in educational philosophy, quality assurance regimes, and academic career pathways present persistent operational challenges. Moreover, the concentrated distribution of programs geographically and disciplinarily invites questions regarding inclusivity, equitable access, and long-term strategic resilience.

Moving forward, the sustainability and continued relevance of Sino-French educational cooperation will likely depend on achieving a deliberate equilibrium between elites specialization and broader integration, alongside greater structural flexibility. Future policy and practices should encourage more diversified geographic and disciplinary engagements, develop adaptive governance mechanisms to bridge systemic differences, and deepen mutual strategic alignment: all while ensuring that collaborative initiatives remain anchored to domestic educational priorities and developmental needs.

Theoretically, this case illuminates how long-term international educational collaboration evolves through path-dependent processes, where historical legacies and policy choice continuously interact with contemporary strategic imperatives. It also highlights the complex negotiation involved in adapting transnational educational models to local institutional ecosystems. For policymakers and institutional leaders, theses insights reinforce the importance of designing cooperative frameworks that are both strategically oriented and operationally adaptive, capable of balancing international aspiration with local sustainability.

Declarations

Author Contribution

The two authors are proved the submitted version of the article. This study is contacted by the corresponding author Dr. LIU Min, data collecting, interviews, and the main manuscript is written by Dr. LIU Min. LIU Xuefei, as master degree student follow the whole procedure of interview and prepared the figures in the manuscript.

References

1. David, Phillips, Michele, Schweisfurth (2014) *Comparative and International Education: An Introduction to Theory, Method, and Practice*, 2nd edn. Bloomsbury
2. Xiaojiong DING, Revolution M (2019) *The Impact of Chinese-Foreign Cooperative Education on the Capacity Building of Higher Education*. Shanghai People's Publishing House Co., Ltd
3. Gita Steiner-Khamsi (ed) (2004) *The global politics of educational borrowing and lending*. Teachers College
4. Klaus, Krippendorff *Content Analysis: An Introduction to Its Methodology* (4th edn, SAGE Publications 2018). <https://doi.org/10.4135/9781071878781>
5. Tosh J (2010) *The Pursuit of History: Aims, methods and new directions in the study of history*, 5th edn. Routledge. <https://doi.org/10.4324/9781315835341>
6. John W, Creswell, Vicki L, Plano, Clark (2017) *Designing and Conducting Mixed Methods Research*, 3rd edn. SAGE
7. Qing LI *The Principle of Educational Public Welfare in the Legislative Regulation of Chinese-Foreign Cooperative Education*[2015] *Shandong Social Sciences* S2:251, <https://doi.org/10.14112/j.cnki.37-1053/c.2015.s2.103>
8. LI S & XIA Xueyan, *History, Current Situation and Future of the Development of Chinese-Foreign Cooperative Education Institutions*[2015]. *J South China Normal University(Social Sci Edition)* 6:78
9. Jinhui LIN *Strategies for improving the international influence of higher education through Chinese-foreign cooperative education under the background of building a powerful education country* [2024]18(03):7
10. Jinhui LIN, YAN Xiao, Weiyang XUE (2015) *Chinese-Foreign Cooperative Education and International Talent Cultivation*Xiamen University Press ISBN 978-7-5615-5457-9
11. Howlett M, Ramesh M (2009) Anthony Perl. *Studying Public Policy: Policy Cycles and Policy Subsystems*. Oxford University Press
12. Norman, Fairclough (2003) *Analyzing discourse: Textual analysis for social research*Routledg. <https://doi.org/10.4324/9781315835341>
13. Pierson P (2004) *Politics in Time: History Institutions, and Social Analysis*. Princeton University Press. <https://doi.org/10.1515/9781400841080>
14. Rayner S *Exploring Institutional Governance Dynamics in China's Transnational Higher Education (TNHE): A Study of Sino-Foreign Joint Institutes*. [2025] *Cogent Educ* 12(1), <https://doi.org/10.1080/2331186X.2025.2450124>
15. Dan WANG *The Evolution and Reconstruction of the Policy of Sino-Foreign Cooperative Education in the Sight of Internationalization of Higher Education*[2019]. *Open J Social Sci* 7:234, <https://doi.org/10.4236/jss.2019.711016>
16. ZHANG Youliang etc, *Understanding the Chinese–Foreign cooperation in running schools: from the perspective of loose coupling theory*[2024]. *J Asian Public Policy* 1,

<https://doi.org/10.1080/17516234.2024.2395021>

17. Chaocheng ZHOU Analysis of Three Frameworks for Quality Assurance in Sino-Foreign Cooperation for Running Schools.[2009]. Chin Educ Soc 42 (4): 97–107, <https://doi.org/10.2753/CED1061-1932420408>

Footnotes

1. Paul Pierson, *Politics in Time: History Institutions, and Social Analysis* (Princeton University Press 2004), <https://doi.org/10.1515/9781400841080>.
2. Ibid.
3. David Phillips and Michele Schweisfurth, *Comparative and International Education: An Introduction to Theory, Method, and Practice* (2nd edn, Bloomsbury 2014).
4. Gita Steiner-Khamsi (ed). *The global politics of educational borrowing and lending* (Teachers College Press 2004).
5. Michael Howlett, M. Ramesh and Anthony Perl, *Studying Public Policy: Policy Cycles and Policy Subsystems* (Oxford University Press 2009).
6. LI Qing, “Zhongwai Hezuo Banxue Jianguan Lifa zhi Jiaoyu Gongyixing Yuanze”(《中外合作办学机构立法之教育公益性原则》, The Principle of Educational Public Welfare in the Legislative Regulation of Chinese-Foreign Cooperative Education)[2015] Shandong Social Sciences S2:251, <https://doi.org/10.14112/j.cnki.37-1053/c.2015.s2.103>; LI Shengbing and XIA Xueyan, “Zhongwai Hezuo Banxue Jigou Fazhan de Lishi, Xianzhuang yu Weilai”(《中外合作办学机构发展的历史、现状与未来》, History, Current Situation and Future of the Development of Chinese-Foreign Cooperative Education Institutions)[2015] Journal of South China Normal University(Social Science Edition) 6:78.
7. ZHANG Youliang and others, “Understanding the Chinese–Foreign cooperation in running schools: from the perspective of loose coupling theory”[2024] Journal of Asian Public Policy 1, <https://doi.org/10.1080/17516234.2024.2395021>; SI Huili and Stephen Rayner, “Exploring Institutional Governance Dynamics in China’s Transnational Higher Education (TNHE): A Study of Sino-Foreign Joint Institutes.” [2025] Cogent Education 12(1), <https://doi.org/10.1080/2331186X.2025.2450124>.
8. WANG Dan, “The Evolution and Reconstruction of the Policy of Sino-Foreign Cooperative Education in the Sight of Internationalization of Higher Education”[2019] Open Journal of Social Sciences 7:234, <https://doi.org/10.4236/jss.2019.711016>; ZHOU Chaocheng, “Analysis of Three Frameworks for Quality Assurance in Sino-Foreign Cooperation for Running Schools.”[2009] Chinese Education & Society 42 (4): 97–107, <https://doi.org/10.2753/CED1061-1932420408>.
9. DING Xiaojiong, *Bianyuan Geming: Zhongwai Hezuo Banxue dui Gaodeng Jiaoyu Nengli Jianshe de Yingxiang* (《边缘革命：中外合作办学对高等教育能力建设的影响》, Marginal Revolution: The Impact of Chinese-Foreign Cooperative Education on the Capacity Building of Higher Education) (Shanghai People's Publishing House Co., Ltd. 2019); LIN Jinhui, YAN Xiao and XUE Weiyang, *Zhongwai Hezuo Banxue yu Guojihua Rencai*

Peiyang (协和外国语学院, Chinese-Foreign Cooperative Education and International Talent Cultivation) (Xiamen University Press 2015) ISBN 978-7-5615-5457-9.

10. John W. Creswell and Vicki L. Plano Clark, *Designing and Conducting Mixed Methods Research* (3rd edn, SAGE Publications 2017).
11. John Tosh, *The Pursuit of History: Aims, methods and new directions in the study of history* (5th edn, Routledge 2010), <https://doi.org/10.4324/9781315835341>.
12. Klaus Krippendorff, *Content Analysis: An Introduction to Its Methodology* (4th edn, SAGE Publications 2018), <https://doi.org/10.4135/9781071878781>.
13. Norman Fairclough, *Analyzing discourse: Textual analysis for social research* (Routledg, 2003), <https://doi.org/10.4324/9781315835341>.
14. LIN Jinhui, "Jiaoyu Qiangguo Beijing Xia Zhongwai Hezuo Banxue Tisheng Gaodeng Jiaoyu Guoji Yingxiangli Celve Yanjiu"(国际比较教育研究, Strategies for improving the international influence of higher education through Chinese-foreign cooperative education under the background of building a powerful education country)[2024]18(03):7.
15. Ibid [3] (Paul Pierson).
16. Ibid [6] (Gita Steiner-Khamsi).

Figures

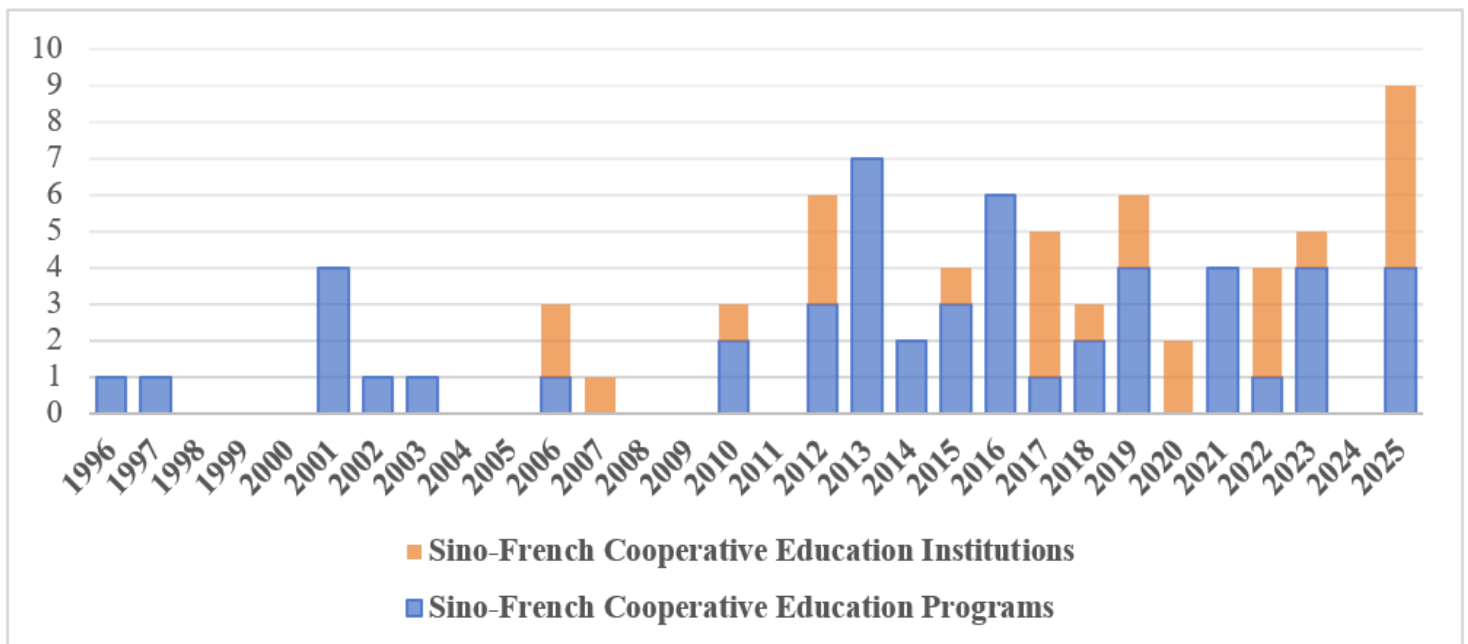


Figure 1

Annual Number of Sino-French Cooperation in Running Schools

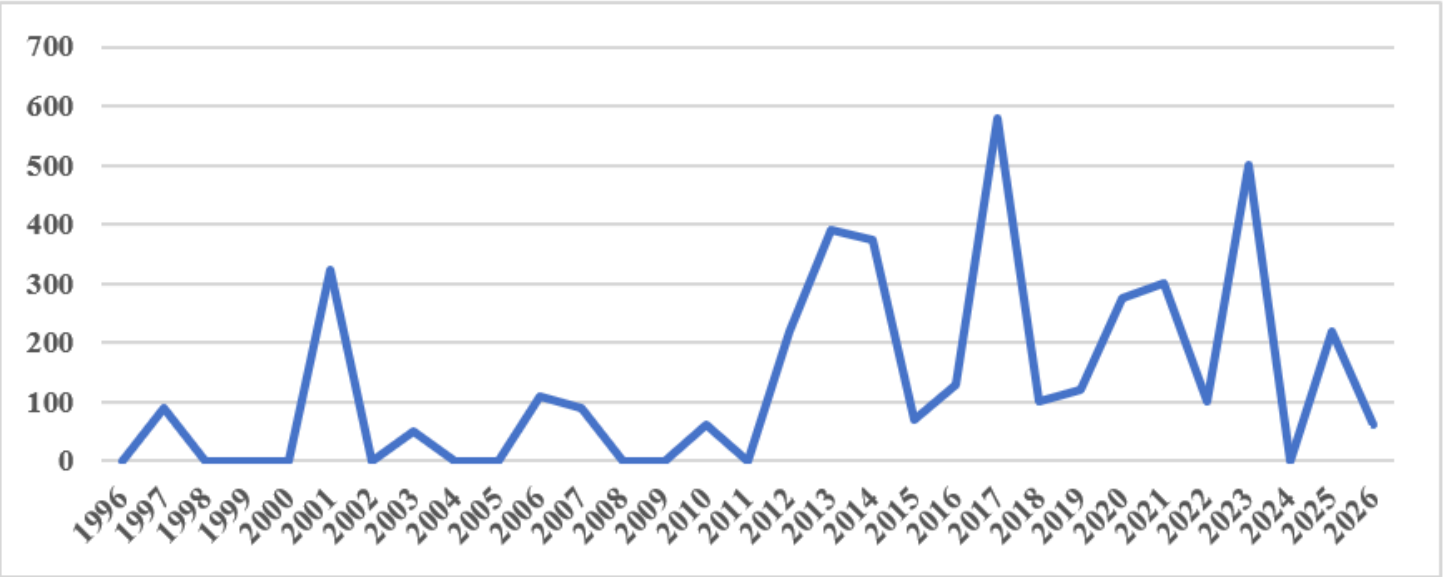


Figure 2

Annual enrollment number of Sino-French Cooperative Education Programs

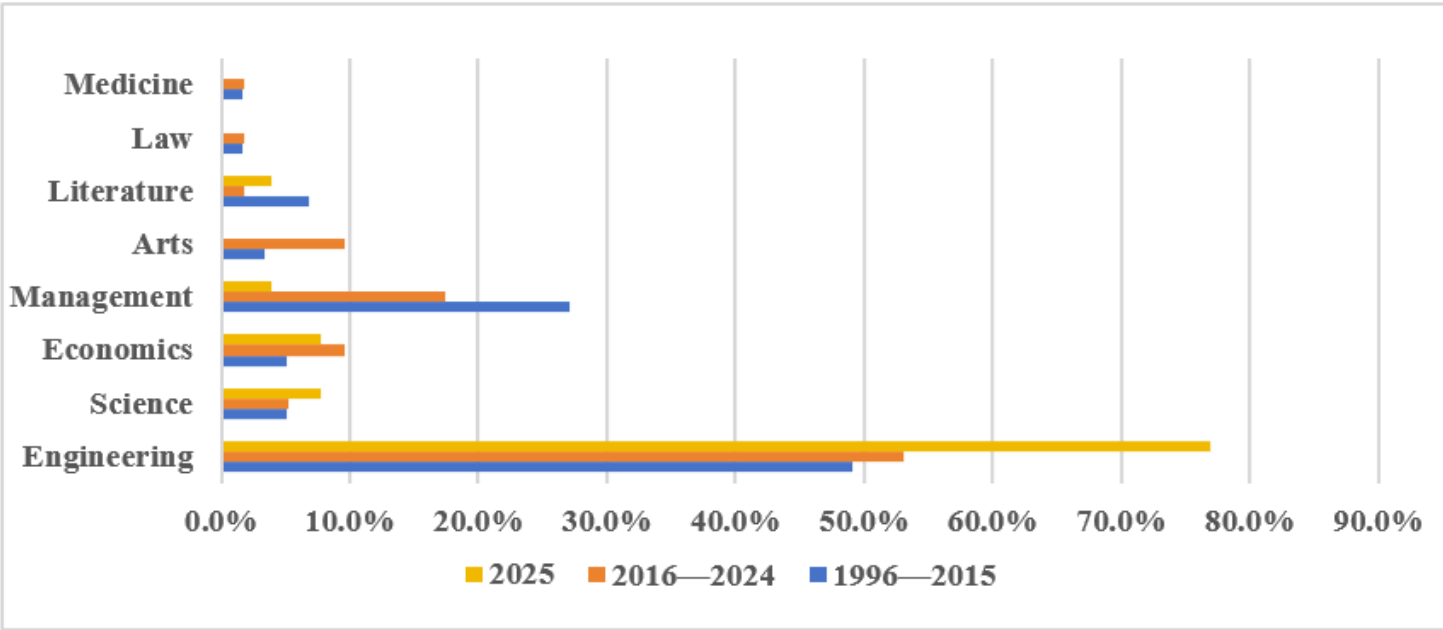


Figure 3

Disciplinary Distribution of Newly Established Sino-French Cooperation in Running Schools, for the Periods Before 2016, 2016—2024, and 2025