

Pursuing World-Class Universities: Managerial Challenges under China's Double First-Class Initiative

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Abstract

China's "Double First-Class" (DFC) Initiative represents a landmark policy to develop world-class universities and disciplines, building on earlier programs like Project 211 and 985. This study examines the managerial challenges posed by the DFC Initiative. The pursuit of world-class status in Chinese higher education is occurring in a context of intense global competition and national aspirations. We conducted a qualitative analysis of policy documents, institutional reports, and existing literature to identify prevalent administrative and governance issues. Key challenges include balancing performance mandates with university autonomy, inequitable resource allocation favoring a select elite, heightened pressure on faculty to "publish or perish," and a tendency toward quantitative metrics and rankings as proxies for quality. These pressures have led to unintended outcomes such as "academic utilitarianism" and neglect of teaching and unranked disciplines. While the DFC Initiative has propelled some Chinese universities toward higher global standings, it has also exacerbated governance tensions and regional disparities. The study concludes that sustainable world-class development in China requires management strategies that mitigate competition's downsides, promote inclusive growth of non-elite institutions, and refine evaluation systems beyond simplistic ranking indicators.

Keywords: World-Class Universities; Double First-Class Initiative; Higher Education Policy; University Governance; Academic Rankings

1. Introduction

China's ambition to build world-class universities has been a national priority for over two decades. Since then 1998 call to develop universities of international caliber, China launched initiatives such as Project 211 and Project 985 to concentrate funding and resources on select institutions. These efforts significantly improved research output and global rankings for leading Chinese universities. However, they also introduced "identity consolidation"—entrenching stratification between privileged universities and the rest. In 2015, the *Double First-Class*



Initiative as a comprehensive policy to upgrade a cohort of universities and disciplines to world-class status. The DFC Initiative (2016–2020 first cycle) designated 42 universities to become world-class and 95 additional universities for first-class discipline development. This new strategy, described as "World-Class 2.0," aimed to supersede 211/985 by introducing performance-based dynamic evaluations and broader inclusion of disciplines.

The DFC policy places Chinese higher education in a broader global context where many countries strive for "world-class" status as a marker of competitiveness (Altbach, 2009; Salmi, 2009). World-class universities (WCUs) are often associated with strong research output, high international rankings, and attraction of top talent. Scholars have noted that global rankings, such as Times Higher Education and ARWU, have become *de facto* benchmarks that policymakers use to gauge progress. In China, these rankings have acted as credentials to legitimize world-class status. However, an overemphasis on rankings can distort university priorities. Managerial challenges emerge when universities are pushed to "chase numbers" at the expense of balanced development (Hazelkorn, 2015; Allen, 2019). For instance, prioritizing research publication quantity and citation metrics may undermine attention to teaching quality or community service. Evidence suggests universities, under WCU pressures, have sometimes adopted a "check box" approach—focusing on easily measurable targets like hiring star faculty and increasing international collaborations to boost rankings. This administrative mindset can result in organizational behaviors geared more toward ranking criteria than intrinsic educational improvement (Ngok & Guo, 2008).

Another challenge is governance and autonomy. The strong steering of the DFC Initiative reflects a top-down management model. Traditionally, officials have relied on administrative tools and campaigns to achieve policy goals in higher education. The DFC policy intensifies performance management through annual evaluations and the of "dynamic adjustments". While this creates powerful incentives, it can also lead to unintended consequences in university behavior. This "target compliance" culture risks stifling innovation and diversity in institutional missions. Indeed, some studies report policy decoupling, where universities publicly endorse DFC goals but internally buffer core operations from disruptive changes. Such strategic ambiguity is used to manage the tension between government expectations and institutional realities. A 2019 analysis by Zhao and You found Chinese universities' strategic plans under DFC often exhibited isomorphism and ambiguity, echoing each other's lofty goals without clear differentiation or concrete roadmaps. This can be interpreted as a managerial tactic to satisfy authorities while preserving flexibility.

Resource allocation under the DFC Initiative presents further managerial challenges. The initiative explicitly takes a "selective concentration" approach, channeling substantial funding into the top institutions and disciplines. Research indicates this has achieved "remarkable preliminary success" for elite universities, but at the cost of vicious competition and a widening gap between advantaged and less-advantaged institutions. Critics argue that regions and universities outside the elite circle receive comparatively little benefit. For example, none of the universities in poorer western provinces initially made it to the world-class list, raising equity concerns (Gao, 2017). Charlotte Gao (2017) highlighted that the 42 selected universities were



concentrated in Beijing, Shanghai, and the prosperous east coast, leaving out entire provinces like Ningxia, Guizhou, and Tibet. This disproportionate distribution of resources can exacerbate the "Matthew Effect," where strong universities become stronger while others struggle. University leaders outside the DFC list face morale and strategic dilemmas: how to compete for talent and research opportunities without comparable support (Hartley & Jarvis, 2021). Even among DFC universities, internal allocation of funds often prioritizes STEM and fields tied to global rankings, potentially neglecting local needs and non-indexed disciplines (Huang et al., 2018). Such dynamics pose challenges for managers striving to uphold comprehensive university development.

Finally, the pursuit of world-class status has intensified academic workload and pressure, raising human resource management issues. Faculty at DFC universities report higher expectations for research productivity, leading to stress and a sense of precarity (Tian & Lu, 2017). "What price the building of world-class universities?" ask Tian and Lu (2017), noting that young lecturers face heavy pressure to produce international publications and secure grants to meet the new performance indicators. This performance culture can undermine teaching engagement and job satisfaction. It may also encourage short-term strategies, like salami-slicing publications or focusing on research areas that yield quick results, possibly at the expense of creativity and long-term impact (Byun et al., 2013; Cao, 2019). Ethical issues can arise if universities or faculty resort to gaming metrics – for instance, excessive self-citation, publishing in lower-quality outlets to boost quantity, or even academic misconduct – all in pursuit of the numeric targets set by world-class criteria (Liu et al., 2023). Managing faculty development and well-being under these pressures is a significant challenge for university administrators.

In summary, the introduction has highlighted key issues: tension between state control and university autonomy, inequitable resource distribution, metric-oriented management, and increased pressure on human capital. The following sections describe the methodology of our inquiry and present a structured analysis of these challenges, drawing on policy analysis and contemporary research. Ultimately, this paper seeks to provide a comprehensive understanding of the managerial landscape under the DFC Initiative and to discuss strategies for addressing the identified challenges in moving toward sustainable world-class universities in China.

2. Methodology

This study employs a qualitative research design centered on document analysis and secondary data. We collected and examined a wide range of documents, including government policy texts (in particular, the 2015 State Council *Overall Plan* and the 2017 Implementation Measures for DFC), ministry press releases, and university strategic plans, to understand the intended management framework of the DFC Initiative. In addition, we reviewed scholarly literature from 2019–2025 that evaluates or discusses the DFC policy and its impacts. Key sources included academic journal articles, policy reports, and authoritative media commentary in both English and Chinese. This literature review was structured to identify common themes regarding administrative challenges and to triangulate evidence of outcomes (both positive and problematic) of the DFC Initiative.



The analysis followed an iterative coding process. First, policy documents were coded for stated objectives, evaluation criteria, and governance mechanisms (e.g. references to funding, evaluation metrics, autonomy, etc.). Next, the academic and commentary literature was coded for observed effects and challenges, using categories initially derived from the introduction (such as governance/autonomy, resource allocation, faculty pressure, and academic culture). Emergent themes – for example, "selective neglect" or "utility maximization," terms adopted from the theoretical framework of unintended consequences – were also incorporated when multiple sources highlighted similar issues. We did not conduct interviews or surveys; however, we drew on prior studies that included interview data (e.g. case studies of specific universities) to inform our understanding (Jiang et al., 2024; Song et al., 2021). All information was cross-validated where possible. For instance, if a policy document claimed an increase in research funding, we checked financial statistics or university reports to verify this claim.

This qualitative approach is appropriate given the study's focus on contextual and processual aspects of management challenges, which are not easily quantifiable. By integrating policy analysis with recent research findings, we aimed to create a comprehensive picture of how the DFC Initiative has been implemented on the ground and the managerial responses to it. The methodology's limitations include reliance on available documentation – which may be subject to official rhetoric – and the potential bias of secondary sources. We mitigated these by using a wide array of sources (including critical perspectives) and by explicitly noting where evidence was mixed or interpretations differed among observers. Our analysis is thus an informed synthesis rather than primary data collection; it provides a broad, multi-faceted examination of managerial challenges that can guide further empirical research or policy evaluation.

Ethical approval and informed consent were not applicable to this study, as it did not involve human subjects or confidential data. The analysis was confined to publicly available information and published materials.

3. Results

3.1. Governance and Accountability under Performance Pressures

A central finding is that the DFC Initiative's strong performance-based accountability framework has created governance tensions at the university level. On one hand, the policy has introduced clearer targets and incentives, which some university leaders credit with sharpening their strategic focus and accelerating reforms (Gao & Li, 2022). The initiative has been "functioning effectively" in terms of pushing institutions to prioritize improvement, yielding "remarkable preliminary success" in certain metrics. For example, many DFC universities have updated their internal evaluation systems and set up special task forces to enhance research output and international collaborations in line with DFC goals (Huang et al., 2018). These changes reflect a governance shift towards what can be termed managerialism – a more corporate, results-oriented management style in Chinese higher education (Austin & Jones, 2015; Neubauer, 2019). University presidents and party secretaries are now explicitly held accountable for meeting DFC



performance indicators such as publications, global ranking positions, and "first-class" discipline development milestones.

On the other hand, the top-down nature of this accountability has constrained institutional autonomy and led to compliance-driven behaviors. Universities often find themselves "working to the test" of DFC evaluations. The Ministry of Education, together with the Ministry of Finance and NDRC, established an annual review system where progress is assessed against quantitative indicators (funding utilization, research benchmarks, etc.), with underperformers warned or even removed from the list. In 2020, midway through the first cycle, at least 16 disciplines at 15 universities received official warnings for not meeting expected standards. This high-stakes environment has led university administrators to concentrate decision-making around DFCrelated outcomes. For instance, some institutions have redirected discretionary budgets to DFC priority disciplines and star faculty recruitment, potentially at the expense of other programs. Internally, "We fill out more forms now to document every achievement for the DFC targets," noted a professor at a DFC university (as paraphrased from Song, 2018). Decision-making authority is increasingly centralized within universities, as leaders tighten control to ensure compliance with DFC mandates (Yang & Welch, 2012; Mok, 2016). This can marginalize departmental or faculty input in governance. The creative latitude of universities to define their own missions is somewhat reduced – there is convergence toward the state-defined template of what a world-class university should look like (high research volume in select fields, international rankings prestige, etc.). While alignment with national goals is not new in Chinese academia, the DFC's intensity and specificity amplify this effect.

Another governance challenge is the risk of short-termism and policy oscillation. University managers had to quickly realign their strategies to the new criteria, even as the fundamental mission (becoming world-class) remained similar. Some administrators express concern that the ever-evolving policy landscape – where projects are periodically rebranded and evaluation metrics change – makes long-term planning difficult (Altbach, 2015; Zhang, 2016). The DFC's second round (initiated in 2022) introduced adjustments such as merging the university and discipline lists and emphasizing service to strategic needs. While these adjustments aim to correct first-round issues (e.g. overemphasis on status over substance), they again require governance adaptation. University must remain agile, but constant agility can conflict with the stability needed for deep institutional development. Administrators thus face the dual challenge of satisfying current DFC performance demands while also safeguarding their university's unique strengths and longer-term trajectory. As one analysis put it, there is a tension between "fast gains" and "slow cultivation" in pursuit of excellence (Hartley & Jarvis, 2021). The governance outcome observed is a careful balancing act: universities comply and perform to secure immediate standing (and funding), yet internally attempt to buffer or translate directives in a way that preserves core academic values and strengths (Song et al., 2021). Not all succeed equally governance outcomes vary, with more resourceful or historically autonomous universities handling the pressures more deftly than smaller provincial institutions (Wang et al., 2024).



3.2. Resource Allocation and Inequality

The results indicate that the DFC Initiative's resource allocation strategy has led to increased disparities, which pose significant managerial challenges both for the beneficiaries and those left behind. By design, DFC concentrates financial and human resources in a select group of universities and disciplines – a "selective excellence" approach (The State Council of the PRC, 2015). This has undeniably bolstered those at the top. DFC universities received substantial funding boosts; for example, many elite institutions were granted special funds to build new labs, hire overseas professors, and support high-impact research projects. Over 2016–2020, central and provincial governments invested billions of RMB into DFC programs (exact figures vary, but Guangdong Province alone invested \mathbf{\feq}5 billion into its high-level universities initiative aligned with DFC). University administrators at these institutions managed budget expansions and were incentivized to spend strategically to maximize outputs in areas measured by rankings and evaluations.

However, this influx of resources has come with efficiency concerns. A recent study using data envelopment analysis on 13 DFC universities found instances of "wasted resources and insufficient output" in some institutions. In other words, not all money has been effectively translated into performance gains. University managers sometimes struggled to absorb the funds productively due to constraints such as limited high-quality research personnel or administrative bottlenecks (Wu et al., 2020). In certain cases, rapid spending led to redundant infrastructure or underutilized facilities. These findings suggest a managerial challenge of ensuring that marginal funds yield marginal improvements, which is non-trivial in large organizations. DFC universities are under pressure to justify the extra funding by showing quantifiable outcomes, adding another layer of stress on administrators (OECD, 2020). This pressure may push managers to allocate resources to quick-win areas (e.g. established research teams that can produce papers quickly) rather than to longer-term investments like undergraduate education or new interdisciplinary fields that might not pay off immediately in rankings (Cao, 2019).

For the *non-DFC institutions*, resource challenges are even more acute. Universities not on the elite list have seen their relative funding and status stagnate or decline in the DFC era (Let's call them "ordinary universities"). Many provincial and municipal colleges must now operate in an environment where talent and funding are magnetized toward DFC universities. This creates brain drain and difficulty in faculty recruitment for ordinary institutions, as top scholars and fresh PhDs gravitate to the well-funded DFC campuses or abroad (Hartley & Jarvis, 2021). From a management perspective, leaders of non-DFC universities face the tough task of motivating staff and students with far fewer resources and limited recognition. Some have responded by seeking niche roles – for instance, focusing on teaching or local-service missions rather than research – but this runs against the prevailing prestige narrative of research excellence (Zong & Zhang, 2017). Others aspire to join the next round of DFC, which encourages a mimicry of DFC institutions' strategies, sometimes at the cost of neglecting local community needs or vocational training (Ngok & Guo, 2008). Regional inequality is also evident: as noted, the first-round DFC list had no universities from several less-developed interior provinces. Although the second round in 2022 modestly expanded the list to 147 universities (adding some from underrepresented



regions), the lion's share of top-tier resources remains in the hands of the historically strong universities, primarily in Eastern China. This imbalance poses national-level management challenges, as it could hinder the goal of a more "balanced and innovative higher education system" that the government professes to build. The Ministry of Education has acknowledged this shortcoming, urging DFC universities to support partner institutions and calling for initiatives to develop "regional first-class" universities (People's Daily, 2017). Nonetheless, implementation of such support has been limited so far.

In summary, the DFC Initiative's resource allocation has improved the *absolute* capacity of China's top universities but at the risk of *relative* widening gaps. Managers at elite universities must ensure efficient and impactful use of the large funds (avoiding complacency and waste), while managers at other universities must innovate to remain relevant and find support through alternative channels (e.g. local government or industry partnerships). The policy's success in aggregate will depend on whether resource concentration yields broad spillover benefits or simply entrenches a two-tier system. Early evidence shows signs of the latter – a stratified system that some researchers describe as potentially "locked-in" unless corrective measures are taken (Wang et al., 2024). Resource inequality, if not addressed, could undermine China's overall higher education quality and social service role, which is an emerging concern for policymakers and university leaders alike.

3.3. Faculty and Talent Management: Pressures and Reforms

The drive to achieve world-class status has led to aggressive talent management policies, bringing both progress and problems. DFC universities have implemented numerous measures to recruit top talent, often with generous incentives. These include the "Thousand Talents" and "Changjiang Scholars" programs which predate DFC but have been expanded during its implementation. As a result, many universities successfully attracted renowned researchers from overseas and other domestic institutions. For example, during 2016–2019, dozens of Chinese diaspora scientists were lured back to assume faculty positions or direct new research centers at DFC universities, significantly boosting the institutions' research profiles (Liu, Turner & Jing, 2019). University HR departments have become more internationally oriented, advertising globally and offering highly competitive remuneration packages and research grants to star faculty (often on par with or exceeding Western universities for senior hires). This has contributed to internationalization at home, enriching academic culture in some places. Additionally, staff development initiatives have been put in place: many DFC universities set aside funds for sending young faculty abroad for training, supporting postdocs, and organizing high-level academic exchanges, all in service of cultivating a more globally competitive faculty body (Huang et al., 2018). From a managerial standpoint, these are positive developments aligning human resource practices with world-class aspirations.

However, the expectation of rapid performance improvement exerts intense pressure on faculty and may inadvertently undermine morale and loyalty. As noted earlier, young and mid-career scholars face rising benchmarks for tenure and promotion. In some DFC institutions, the tenure clock has effectively shortened – faculty are expected to publish in top journals within a few years or risk contract termination (Tian & Lu, 2017). A "perish or publish in top venues" ethos is now



commonplace, which, according to interviews in one case study, has led to anxiety and a narrowing of research creativity among lecturers (Tian & Lu, 2017). The quantity-over-quality dilemma is frequently mentioned: faculty feel compelled to prioritize the number of publications and the impact factor of journals over exploratory or interdisciplinary work that might be less immediately rewarded (Cao, 2019). Additionally, teaching, mentoring, and community engagement – dimensions of a university's mission not directly measured by DFC criteria – tend to be devalued in faculty evaluations (Song, 2018). Some academics report spending less time preparing lectures or meeting students, as those efforts do not count toward the KPIs that matter for the world-class agenda. This skewing of academic roles presents a challenge for departmental chairs and deans who must ensure that essential teaching and service obligations are met even as institutional emphasis tilts heavily toward research outputs (Yang & Welch, 2012).

Another talent management issue is the emergence of a *two-tier faculty* within universities. Highly productive researchers and star hires enjoy substantial support and lighter teaching loads, whereas other faculty bear heavier teaching duties and may have fewer research resources. This stratification can reduce collegiality (Byun et al., 2013). Managing equity and inclusion in faculty development has thus become trickier. In extreme cases, universities have resorted to contracting out teaching to adjuncts or creating teaching-only positions to free up research stars – a practice that, if not carefully managed, might dilute educational quality for students. The DFC push has also led to increased use of quantitative metrics in faculty appraisal – counting publications, citations, grants – which faculty sometimes criticize as a reductive approach to academic achievement (Cao, 2019). University administrators are aware of these pitfalls; some have begun introducing more holistic evaluation criteria (e.g. considering teaching awards or social impact of research), but these remain secondary in the DFC era.

On the positive side, the heightened competition has spurred many faculty to increase their research capacity and international engagement. English proficiency and international collaboration among Chinese academics have generally improved, as these are necessary for publishing in high-impact journals (Liu et al., 2019). Moreover, the focus on disciplines has prompted universities to build stronger academic teams. A discipline selected as "first-class" usually gets support to form an excellent research group (often multidisciplinary) and is encouraged to benchmark against top global programs. This has led to the formation of new research institutes and think tanks - for example, artificial intelligence centers, advanced materials institutes, etc., at various DFC universities – potentially paving the way for breakthroughs (Dong et al., 2025). The challenge for management is to ensure these teams and institutes have continuity beyond short-term targets. Some experts caution that if funding is too tightly tied to annual DFC evaluations, research teams may focus on incremental projects that guarantee publications, rather than high-risk, high-reward research (Ministry of Education of the PRC, Ministry of Finance, & National Development and Reform Commission, 2017). Encouraging an environment of academic freedom and risk-taking is difficult under strict accountability, yet it is essential for true world-class innovation.

In conclusion, talent management under the DFC Initiative is a double-edged sword. It has energized and internationalized the faculty but also intensified stress and potential distortions in



academic roles. University managers must navigate between demanding excellence and maintaining a healthy, sustainable academic workforce. Initiatives like providing better mental health support for faculty, rewarding quality of work (not just quantity), and fostering mentorship and collaboration can help mitigate negative effects. A few top universities have started experimenting with such measures – for instance, instituting "teaching relief semesters" for young researchers to develop major grant proposals or creating internal funds for blue-sky research not immediately tied to output metrics. These are steps toward a more balanced approach to talent cultivation in the shadow of the world-class race.

3.4. Academic Culture and Mission Drift

The findings also reveal concerns about shifts in academic culture and potential mission drift as universities pursue world-class status. The intense focus on rankings and research prestige under DFC can inadvertently narrow the traditional mission of Chinese universities. One prominent issue is the neglect of non-ranked disciplines and broader educational roles. Under the first DFC round, certain foundational but less internationally visible fields (like pure mathematics, basic humanities, and some social sciences) did not receive as much attention because improvements there would not immediately reflect in global rankings. This led the Chinese government to explicitly mention in the 2022 "Second Round Opinions" the need to strengthen foundational disciplines and avoid shortcomings of the first round. Nonetheless, at the institutional level, administrators faced hard choices: when allocating scarce resources, should they build another engineering research lab that might produce Nature papers, or invest in the history department which contributes more to undergraduate education and national heritage? Many leaned toward the former. Over time, this skew risks creating imbalances in academic offerings. Some scholars warn of a "crisis in the humanities" if current trends continue. While Chinese universities historically have strong humanities and social science traditions, the world-class push emphasizes STEM and globally ranked fields, potentially undermining support for areas that foster critical thinking, cultural understanding, and social development. University managers conscious of this have tried to shield certain departments from budget cuts or to cross-subsidize them with other income, but the prestige hierarchy is clear and influences internal culture (Huang et al., 2018).

Another aspect of academic culture under pressure is ethical norms and academic integrity. The push for rapid results and high volumes of publication has, in a few cases, led to scientific misconduct or gaming of the system, which can tarnish a university's reputation. Managers have had to strengthen oversight: for example, several universities created offices for research integrity and introduced policies penalizing paper mill usage or plagiarism, after some high-profile scandals in the late 2010s. These corrective steps are part of adapting the academic culture to a high-stakes environment. The broader cultural challenge is to maintain *academic values* – pursuit of truth, open inquiry, collegial peer review – when the environment tilts towards metric-driven success. Faculty surveys (Song et al., 2021) have noted a sentiment that "the soul of scholarship is being eroded by the scorecard." Senior academics worry that younger faculty are being socialized into valuing impact factors more than impact on society or students. This is an intangible but significant challenge: nurturing an institutional ethos that values quality, integrity, and public service even as numerical targets dominate discourse.



Mission drift is also evident in the community service and teaching missions. Many Chinese universities historically have played crucial roles in regional development, adult education, and addressing local needs (e.g. agricultural universities spreading new techniques to farmers, normal universities training school teachers). The DFC initiative, with its global research emphasis, may pull institutional attention away from these missions. A university chasing world-class status might downsize its continuing education programs or prioritze international collaborations over local partnerships, if the latter do not contribute to rankings. Some DFC universities have indeed reduced their involvement in community extension programs, transferring those responsibilities to lesser-ranked colleges or local agencies. While specialization and division of labor in the system can be efficient, it raises the question of whether the "ecological balance" of China's higher education is being upset (Wang et al., 2024). If every university aspires to be like Tsinghua or Peking University, who will fulfill the roles of teaching-focused colleges, vocational training, or regional innovation hubs? Education experts emphasize that a healthy system requires diverse institution types, not only research giants (Altbach, 2015; Salmi, 2009). Chinese policymakers have acknowledged this in principle, yet the prestige and incentives of DFC make it hard for universities (and provincial governments overseeing them) to opt for anything less than the worldclass model.

Interestingly, recent developments suggest some course corrections in academic culture. A few top Chinese universities announced in 2021–2022 that they would withdraw from certain international rankings or de-emphasize rankings in strategic plans. For instance, Renmin University famously quit the international rankings, with leaders stating they want to focus on serving China's needs rather than chasing global rank numbers (Postiglione & Huang, 2022). This bold move was lauded by some as reclaiming academic autonomy and mission. It indicates a growing reflection within the academic community on the *costs* of the world-class obsession. University managers are increasingly tasked not just with climbing metrics, but with articulating a clear vision of their institution's identity and purpose *beyond* the metrics (Marginson, 2016). In practice, this might mean setting internal goals for contributions to local community, undergraduate education quality, or national strategic fields (like ethnically inclusive education or ecological sustainability) that are not directly measured by global indices. Aligning the DFC goals with these broader missions is a delicate but necessary management task to avoid mission drift.

In conclusion, the academic culture in Chinese universities under the DFC Initiative is in flux. There have been positive changes such as a stronger performance ethos and international outlook, but also negative trends like utilitarian attitudes and narrowed missions. The challenge for academic leaders is to cultivate a world-class culture that remains rooted in core academic values and national/local responsibilities. This involves protecting academic freedom and diversity of inquiry, even as they pursue excellence. It may also involve pushing back, judiciously, against aspects of the DFC framework that conflict with educational principles – for example, by rewarding excellent teachers and not just researchers, or by investing in important disciplines that rankings ignore. Some evidence of this recalibration is emerging in the second round of DFC, where policy language has shifted to stress *quality over quantity* and *service to society* (Australian Government Department of Education, 2022). The success of the initiative in the long run will



depend on embedding a truly holistic definition of "world-class" – one that includes world-class teaching, ethical scholarship, and societal impact, not just research metrics.

4. Discussion

The above results paint a complex picture of how China's Double First-Class Initiative has reshaped university management. In this discussion, we situate these findings in a broader context and explore their implications for policy and practice. The challenges observed in China resonate with experiences in other countries that have pursued world-class university status, albeit with local nuances. For example, South Korea's BK21 and WCU projects similarly led to increased research output but also issues of faculty stress and neglect of teaching (Byun, Jon & Kim, 2013). In Japan, efforts to create elite "Top Global Universities" have had mixed results, encountering cultural resistance to drastic reforms (Yonezawa & Shimmi, 2016). China's approach under the DFC stands out for its scale and state-driven intensity – few systems have such a centrally coordinated push across dozens of institutions simultaneously. This has advantages: coordinated resource mobilization and clear national direction can achieve rapid gains (indeed, Chinese universities have climbed steadily in global rankings over the past five years). However, the challenges documented (governance strains, inequality, academic pressure, cultural shifts) highlight the *trade-offs* inherent in a rankings-focused excellence drive.

One key discussion point is the sustainability of improvements. Will the world-class achievements be lasting, or are some of the gains superficial or fragile? The concept of "policy decoupling" (Song, Chu & Xu, 2021) mentioned earlier is relevant here. If universities make symbolic or short-term changes to satisfy evaluation indicators without deeper institutional transformation, the progress could plateau or backslide once external pressure is lifted. Some observers suggest that the DFC Initiative's initial phase created a compliance culture more than an improvement culture. For sustainable excellence, universities must internalize quality enhancement mechanisms. There are positive signs: several DFC universities are overhauling their governance structures – for instance, by empowering academic committees in decision-making and improving financial transparency – aiming to align with global best practices in university management (Liu, Q. et al., 2019). These internal reforms, though less flashy than ranking jumps, are crucial to long-term success. The discussion in China is increasingly about moving from "benches to brains" – i.e. from building hardware and meeting numeric targets to cultivating soft power of academic innovation and critical thinking (Altbach, 2015). It suggests that Chinese higher education leaders recognize the need to avoid "hollow world-class" status.

Another aspect for discussion is the impact on system diversity and equity. The results confirm that the world-class initiative, by concentrating resources, risks creating a bifurcated system. This was not entirely unintended – the idea was to create flagships that would pull up the rest eventually. But ensuring that uplift happens is a challenge. One strategy could be strengthening collaboration networks: fostering mentoring relationships where DFC universities partner with regional universities to jointly develop programs, share resources (such as libraries, online courses), and co-author research. Some pilot programs exist – for example, Tsinghua University



has been helping smaller institutions in western provinces via remote lectures and joint research platforms. Scaling up such collaborations requires incentives. The Ministry of Education might consider integrating *cooperation metrics* into the DFC evaluation (e.g. rewarding a DFC university for improving a partner college's outcomes). This could mitigate the competition-only paradigm and promote a more inclusive excellence model (OECD, 2020). From a management perspective, university leaders would then balance competition with collaboration, possibly easing some of the current zero-sum mindset.

The second round of the DFC Initiative (2022–2025) offers a timely opportunity to address first-round shortcomings. According to policy documents, adjustments have been made: the merger of university and discipline lists is meant to prevent universities from chasing status without genuine program strength, and more weight is given to quality of talent cultivation and service to national needs. International collaboration remains encouraged, but there is also a call to develop "Chinese characteristics" in evaluation, not relying solely on Western ranking metrics (Australian Government, 2022). This reflects a maturation in policy thinking – an understanding that world-class universities must ultimately be defined by how well they fulfill the country's educational mission and contribute to global knowledge, not just by their rank label (Marginson, 2016). The success of these new emphases will depend on implementation fidelity. If evaluation teams truly assess qualitative improvements (like curricular innovation, graduate outcomes, societal impact) rather than just counting papers and prizes, it could realign managerial focus in the desired way.

For university managers on the ground, one implication is the need to adopt a more holistic management approach. This means developing multi-dimensional internal KPIs that go beyond those the government tracks. A few leading universities have started doing so. For instance, Peking University's latest strategic plan includes goals for undergraduate teaching excellence and interdisciplinary knowledge creation that are not directly part of DFC metrics, signalling to departments that those areas matter. Such internal priority-setting can guard against mission drift. It also means investing in *faculty development and well-being*. The discussion around faculty stress suggests universities might need to recalibrate workloads and provide support systems to maintain productivity without burnout (Tian & Lu, 2017). Initiatives might include faculty mentorship programs, research seed grants (to encourage quality over quantity), and recognition for outstanding teaching or community service in promotion criteria. These changes require courage and leadership from administrators to implement, especially if they perceive them as running counter to short-term DFC expectations. However, in the long run, nurturing a supportive academic environment is itself a hallmark of truly world-class institutions (Shattock, 2017).

It is also instructive to view China's experience through the lens of global higher education policy. The managerial challenges encountered echo what higher education scholars call the "excellence vs. equity" and "accountability vs. improvement" dilemmas (Salmi, 2009; Hazelkorn, 2015). China's DFC Initiative can be seen as a massive natural experiment in pushing the excellence agenda. The early results – significant improvements in research output and rankings for top universities – demonstrate that concerted investment and pressure can yield quick gains. Yet, the parallel challenges highlight why some caution that an overemphasis on rankings may



undermine other essential functions of universities (The State Council of the PRC, 2015). There is a growing international conversation about redefining what a "world-class university" means in more inclusive and socially responsible terms (Marginson, 2016). China, given its size and influence, could contribute to this redefinition. If Chinese universities can evolve the DFC Initiative to foster not just competition but also collaboration, not just academic impact but societal impact, they might offer a model of a "world-class system" rather than a few world-class universities (Yang & Welch, 2012; OECD, 2020).

In summary, the discussion underscores that the managerial challenges are not intractable; they are the growing pains of a system in transformation. A balanced scorecard for higher education development is needed – one that incorporates quality of teaching, equity across institutions, and academic freedom alongside the traditional metrics of research excellence and global recognition. University managers and policymakers in China appear to be learning and adjusting: the second round of DFC and independent actions like Renmin's ranking withdrawal suggest a search for equilibrium. The Chinese experience thus far suggests that world-class aspirations can drive rapid advancement, but to be sustainable and meaningful, they must be pursued with reflexivity and a commitment to the broader values of education. The next section concludes with concrete recommendations and reflections on how Chinese higher education can continue to pursue world-class goals while managing and mitigating the challenges identified.

5. Conclusion

China's Double First-Class Initiative has been a bold and consequential push to elevate the country's higher education to the forefront of the world. This paper examined the managerial challenges that have emerged under this initiative. We found that while the policy has spurred notable gains – increased research outputs, improved global rankings, and enhanced international visibility – it has simultaneously created significant strains on university management in areas of governance, resource allocation, human resources, and academic culture. The pursuit of world-class status, as the Chinese case shows, is not merely a technical or financial endeavor; it is an organizational and social transformation that must be carefully balanced to avoid unintended negative outcomes.

Key challenges identified include the tension between centralized accountability and institutional autonomy. University leaders are navigating how to meet stringent performance targets without sacrificing the innovative spirit and diverse missions of their institutions. Another challenge is the inequity and stratification that can arise from concentrating resources at the top. If left unaddressed, this could lead to a permanently tiered system that undermines national higher education cohesion. We also highlighted the pressures on faculty and the risk of a hypercompetitive academic environment that may, paradoxically, reduce creativity and morale over time. Finally, the potential for mission drift – with universities focusing narrowly on rankings at the expense of teaching quality, humanities, social contributions, and student development – is a cautionary tale evident in the Chinese experience.



However, the trajectory of the DFC Initiative is not fixed. China's policymakers and university administrators have shown awareness of these issues and signaled adjustments, such as the refined criteria in the second round of DFC and a broader definition of excellence that includes foundational disciplines and societal impact. The lessons learned from this ongoing process have relevance beyond China. For nations and institutions aspiring to world-class status, the Chinese case underscores the importance of *holistic planning*. Adequate funding and clear goals are necessary but not sufficient – mechanisms must be in place to ensure that quality trumps quantity, that competition does not eclipse collaboration, and that short-term achievements lay the foundation for long-term strength.

In conclusion, the pursuit of world-class universities in China under the Double First-Class Initiative is a story of rapid advancement entwined with managerial complexity. The findings of this study suggest several recommendations: First, balance metrics with mission – Chinese universities (and the ministries overseeing them) should integrate qualitative and impact-oriented indicators into evaluation systems to complement quantitative metrics. Second, promote inclusive excellence – channel some DFC resources and expertise towards capacity-building in non-DFC institutions to ensure the overall system improves, not just the elite segment. Third, support faculty and nurture academic culture – provide professional development, reasonable workload policies, and incentives for teaching and service, to maintain a healthy academic workforce and vibrant scholarly community. Fourth, embrace flexibility in governance – allow institutional differentiation and encourage universities to innovate in management practices that suit their context, rather than a one-size-fits-all approach. By implementing these measures, the goals of the DFC Initiative can be achieved in a more balanced and sustainable manner.

China's journey toward world-class universities is far from over, but it is clear that the focus is shifting from purely "getting there" to "how to stay there and at what cost." The managerial challenges confronted and gradually overcome in this process will shape the character of Chinese higher education for decades to come. Ultimately, the success of the Double First-Class Initiative will not only be measured by how many Chinese universities sit in the global top 100, but by how well the initiative contributes to an innovative, equitable, and vibrant educational ecosystem that serves China and the world. The experiences and adjustments in China can provide valuable insights for global higher education policymakers seeking to foster excellence without losing sight of the fundamental values and purposes of universities.

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