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# Regulatory and Institutional Frameworks of Architecture Education in India under NEP 2020: Challenges, Gaps, and Future Directions

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#### **ABSTRACT**

Architecture education in India is undergoing a major paradigm shift through the National Education Policy (NEP) 2020, which aspires to simplify governance, improve quality, and encourage multidisciplinary learning. While reforms in architectural education are now underway, issues still remain which erode the viability of architectural discourse and modes of educational preparation within the architectural community. This study attempts to fill the void in understanding how the overlap of regulation and institutional variability, and lack of pedagogy, plays in shaping the current and future of architectural education. This research aims to review and critically analyse architecture education regulation and institutional arrangements in India, focussing upon Karnataka, to identify systemic factors that constrain architecture institutions and prepare and equip them for reform and enactment. This study used qualitative analysis of a variety of policy documents, frameworks, accreditation processes, and literature, in addition to incorporation of observation and secondary data from government and professional institutions. The study finds significant disparities in the provision of infrastructure for schools of architecture between metropolitan and Tier 2/3 cities, overlapping regulatory power between Council of Architecture (CoA), AICTE and UGC, government institutions with little autonomy, shortage of faculty, no research-led and/or community engagement in teaching, insufficient congruence between the intent of the curriculum and what happens in a classroom, little consideration of digital technologies and sustainability in architecture, and limited ability for the sector to diversiify and adapt to a global standard for architecture educaton. The authors conclude by pointing out that although NEP 2020 offers a vibrant vision, stakeholders need to embrace strong practices for implementation in terms of supporting greater 'regulatory coherence' across the education landscape, increasing institutional autonomy at multiple levels, investing in faculty development, and embedding practice-linked and community responsive pedagogy. The Contributions Section outlined elements of future practice which will include more collaborative governance, the integration of emerging technologies existing systems, and enhanced collaborations between the academy, the profession, and industry to maintain both competitiveness and contextuality in architectural education across the globe.

Keywords: Architecture education, NEP 2020, regulatory framework, institutional governance, curriculum, faculty shortage, Karnataka, higher education reform.

# 1. Introduction

The development of architectural education in India has been informed by historical contexts, influences of colonialism and a nation in various stages of urbanization motivated by a rapidly changing environment. Then there are the early architecture schools in the mid-20th century like Sir J. J. College of Architecture in Mumbai and the School of Planning and Architecture in Delhi. Architects education has experienced cycles of rigid and consistent professional regulations, along with a few occasions of amendment and change in order to align education with the national development objectives

(Roy, 2022; Dua & Chahal, 2014). The Council of Architecture (CoA) established under the Architects Act of 1972 is a statutory body and has been responsible for regulating minimum standards in architectural education, recognition of programs and accreditation of professionals in India (Council of Architecture [COA], 2020). Historical governance of higher education is always multivalent in India with multiple institutions (University Grants Commission [UGC], 1980; All India Council for Technical Education [AICTE], 1987) and there is an inherent overlap of domains (Prasad, 2021). Internationally the debate about teaching architecture in is still directed towards flexibility, interdisciplinary education, relevance of sustainability, digital, and community engagement when addressing the same (Salama, 2016, 2021). Against this backdrop, India's National Education Policy (NEP) 2020 was a momentous and potentially disruptive change in integrating the higher education field's regulatory functions under the proposed Higher Education Commission of India (HECI), fostering outcome-based and multidisciplinary learning, and bringing Indian education up to par with global standards (Ministry of Education, 2020; Gupta 2021). The NEP's focus on Indian Knowledge Systems (IKS), flexible curricula, and technology integration presents opportunities and challenges for architectural education that straddles being a regulated profession, creative practice, and academic inquiry. This reconstructed regulatory environment presents an opportunity to re-evaluate the institutional landscape of architecture education in India, especially since India is making great efforts to deal with urbanization, sustainability, and socio-spatial inequalities through the built environment professions (Chatterjee & Mehta, 2019; Agarwal, 2021).

The positive policy developments associated with NEP 2020, architectural education in India is still haunted by structural, pedagogical and curricular issues. Perhaps the most significant issue is the rigidity of curricula with a mandated or "pdf" syllabus that does not adequately facilitate indigenous knowledge, contemporary urban problems or lend itself to interdisciplinary content (Ministry of Education, 2020; Sheoran, 2024). This deficiency will play out in the design studio that is deemed the hub of architectural learning, however lacks a combination of rich immersive experience, construction practicums, and co-creation based living projects (Salama, 1995; CoA, 2023). Furthermore, the shortage of faculty, in a non-existence of competition, impedes research-led teaching replacing with superficial experiential learning in the emerging digital design, building performance and sustainability areas, imposing limits on the construction of practicebased knowledge or the embedding of practice-based knowledge into pedagogical curricula (CII & Deloitte, 2023; Kumar & Sharma, 2021). The situation is complicated by geography: Curiously as with metropolitan institutional universities enjoying privilege from rational infrastructure and global networks, Tier-2 and Tier-3 city institutions experience near to zero demographics of the existence of laboratories, suitable studios and digital technologies, revealing significant inequity in student outcomes (NITI Aayog, 2025; Click4College, n.d.). Compounding this situation is the overlapping of accreditation agencies, as for example, the NAAC at an institutional level of laws, and the NBA at the level of program laws of accreditation, whilst the CoA pursues statutory primacy and collides with the AICTE and UGC for law jurisdiction and the means of practice-based assessment (Supreme Court of India, 2019; NAAC, 2023; NBA, n.d.). The overlap in regulation increases transaction costs, extends the process of curricular reform and leaves institutions in tension with competing compliance requirements (Prasada, 2021). Also, the lack of autonomy of government colleges restricts curricular innovation as only a handful of institutions in states like Karnataka have attained autonomy, leaving little room for flexibility as envisaged in NEP 2020 (Sancheti, 2019; Preetu & Chhapia, 2024). Furthermore, COVID-19 exposed the fragility of the sector, revealing a lack of digital readiness and underscoring the need for hybrid and resilient modes of teaching (Varma & Jafri, 2021; Altbach & de Wit, 2020). Therefore, whilst NEP 2020 proposes a multidisciplinary approach to learning, with an aim to align education with current global and technological demands, there are systemic, pedagogical and institutional barriers in its enactment in architecture schools that impede innovation.

This research resides at the intersection of these policies, structural impediments, and broader global transformations in architectural education. Although several research pieces have examined the problematic of higher education in India more broadly (Ahmad & Nath, 2017; Aithal & Aithal 2019; Thomas et al, 2025), studies directly investigating the regulation and institutionalities of architectural education under the NEP 2020 are scarce (Prasad, 2021; Sheoran, 2024). Some research highlights substantial gaps in publishing capacity of faculty research, fragmented systems of governance, gaps in community engagement, and sustainability and digital technologies (Nanda & Singh, 2019; Rajeev & Mohammad, 2022; Joshi & Ahluwalia, 2020) but few studies provide an integrated overview of how the NEP 2020 reforms are working together with existing institutional ecosystems of architectural education and the implications for professional and societal

outcomes in the long term. This paper seeks to address this gap by providing a systematic and comprehensive analysis of the regulatory and institutional constraints and identifying the gaps between policy aspirations and policy implementation on the ground, and exploring pathways to realign architecture education with the demands of a rapidly urbanising and environmentally stressed India. This research contributes to the discourse on changing professional education in the context of higher education transformation in India by interrogating problems of regional imbalances, faculty shortages, constraining autonomy, and fragmented and lingering regulations with a focus on implementing sustainable approaches to issues and contexts to achieve a more sustainable way of living. It provides a grounded understanding of how architecture education may shift to better-take form of global best practice while also ensuring graduates both professionally competent and socially, future-ready (Salama, 2016; Chakrabarti et al., 2023; Wadhwa, 2024). It pinpoints important gaps between policy ambitions and practical realities, emphasizing how proximal bodies, territorial fragmentation, staffing shortages, low levels of organizational autonomy, and fragmented 'variants' or 'disseminations' of architectural education have all worked to dampen the potential of architectural education to evolve.

#### 2. Literature Review

The architecture education regulatory and institutional system in India has been substantially repackage and restructured after the introduction of the National Education Policy (NEP) 2020. Historically, the Council of Architecture (CoA) acted as the statutory body under the Architects Act, 1972 to regulate curriculum, faculty qualifications, and infrastructure (Council of Architecture [CoA], 2020). The NEP 2020 provided a different path of reorganization of higher education regulation though the Higher Education Commission of India (HECI) that took a larger administrative domain, and shuffling around these regulations, influences higher education in design disciplines like architecture (Gupta, 2021). In this framework, hedging into accreditation is cut between the National Assessment and Accreditation Council (NAAC) at the institutional level and the National Board of Accreditation (NBA) at the programmatic level, with each body regulating when it wants to set benchmarks for quality (NAAC, 2023; NBA, n.d.). Even after the COVID-19 pandemic redefined local context, architecture continues to work under a cloud of uncertainty of jurisdiction, and friction of regulatory space, merging the roles of CoA, UGC and AICTE (Prasad, 2021). Scholar have questioned if the NEP 2020 intent of flexible, interdisciplinary, and integration of Indian Knowledge Systems (IKS) is able to disentangle itself from a stereotypical, homogenous and traditional rigid architecture curriculum that still remains foreign and unrelated to local contexts and practice (Roy, 2022; Joshi & Ahluwalia, 2020). This misalignment typically creates a gap between the pedagogical intention and educational delivery, thereby restricting innovation in architectural education and creating a gulf between academia and profession (Nanda & Singh, 2019).

Another area of literature sought to highlight systemic challenges related to institutional variation, limited numbers of staff, and weak links between education and practice. Examples of regional variation can be seen in Tier-2 and Tier-3 cities, where architecture colleges have old studios, poorly equipped laboratories, and outdated digital infrastructure (to deliver an experiential, practice-oriented pedagogy) (NITI Aayog, 2025; Click4College, n.d). Further restrictions in the sector are due to staffing shortages in areas such as sustainability, digital design, and data driven urban planning, with many institutions relying on overloaded staff teaching classes and monograph loads whilst relying on them treating projects rather than being contribute to a culture of research-based teaching and industry partnerships (Kumar & Sharma, 2021; CII & Deloitte 2023). Under such conditions, students are most affected in their preparedness for professional practice and need better training on minimum standards that will prepare them for future careers in industry noted concerns expressed by industry - regarding the mismatch between graduate skills and expectations in industry (Rajeev & Mohammad, 2022). Relatedly, connected to a shift globally in architectural education that engages workflows (BIM, AI-enabled design), sustainability vocabulary, and cross-disciplinary collaboration (Salama, 2021; Chakrabarti et al, 2023). Indian institutions possess uneven capacities for the adoption of these innovations, highlighting that unless the systemic conditions (governance overlaps, equity of resources and availability of faculty development opportunities) are systematically amended, the vision of NEP 2020 for architecture education to be holistic, integrated with practice and globally competitive may be compromised (Patel & Shah, 2022; Wadhwa, 2024). As the literature suggests, there is an emerging complexity of interdependencies of factors between the restructuring of regulation, institution silos, and pedagogical weaknesses in architecture education, indicating the significant need to respond through coordinated reform if the intentions of architecture education, in the interest of the profession, society and the profession's ability to respond to technological developments, is to be realised.

### 3. Methodology

This research is designed qualitatively and exploratorily to study the regulatory and institutional contexts for architecture education in India under the National Education Policy (NEP) 2020. The methodology uses document analysis and literature review primarily. Policy documents, statutory reports (Council of Architecture, University Grants Commission, All India Council for Technical Education, and Ministry of Education), and institutional guidelines are reviewed systematically to follow governance and reform in architectural education. The peer-reviewed journal articles, working papers, and government publications, are also reviewed to situate an understanding of the emergent themes like rigidity of curriculum, disarray in regulatory framework, lack of faculty, and disparity of facilities. To increase reliability, triangulation strategy was used by comparing secondary data with professional commentary, sector reports, and court rulings on governance of higher education institutions.

This analysis employed a thematic content analysis approach that coded the materials into categories such as "regulatory overlaps," "curriculum and pedagogy," "faculty and research," "region," etc. The themes were then synthesized to reveal structural demands and inconsistencies of policy intentions and institutional practices. This approach favours meaning making over quantitative generalization, thereby embedding findings in the larger discourses of higher education reform and professional practice in architecture. Although it has relied only on secondary data, the study was able to pull together a set of disparate pieces of knowledge from legal, institutional, and academic domains — as such, it was able to take a critical look at systemic gaps and inequities in regions, and suggest pathways for architecture education.

#### 4. Regulatory Framework Of Architecture Education

The diagram of the organizational structure provides a detailed picture of the educational governance and regulatory framework for architectural and engineering colleges in India under the National Education Policy (NEP) 2020 that depicts the functions and structure of various central and state entities. The image also reveals the closely aligned and streamlined structure that NEP 2020 has implemented in the regulatory framework. At the peak of the governance structure is the Central Government that encompasses national educational policies implementing regulations. The central body has a direct relationship with Central Advisory Board of Education (CABE), which is an advisory and policy-making body between central and state bodies. CABE facilitates the relationship between the two unique governments to ensure uniformity and the main-streaming of educational quality in the country. With the introduction of NEP 2020, the Ministry of Human Resource Development (MOHRD) has been replaced by the Ministry of Education (MoE), which has reorganized its' educational framework and policies for the country's education and aligned its policies with the intended vision of NEP 2020. With this new system, the Higher Education Commission of India (HECI) becomes the top regulatory authority for higher education. It replaces the former organizations, the University Grants Commission (UGC) and All India Council for Technical Education (AICTE). The Council of Architecture (COA), which had previously been a statutory and separate body, has also been brought under this system to mange architectural education using NEP reforms.

The HECI has four verticals to allow specialization and efficiency of function:

- 1) National Higher Education Regulatory Council (NHERC) provides regulation and governance of higher educational institutions.
- 2) General Education Council (GEC) provides curriculum designs and learning outcomes of general education.
- 3) National Accreditation Council (NAC) provides accreditation, and quality standards.
- 4) Higher Education Grants Council (HEGC) finance and funding of higher educational institutions.

The colleges of architecture and engineering that are centrally funded or operate on their own fall directly under the jurisdiction of HECI and COA. These institutions must conform to HECI guidelines and quality standards, which cover curriculum, faculty, infrastructure, and student support mechanisms. In addition to their central mechanisms, accrediting agencies are important players in education to maintain educational quality. Two agencies are mentioned:

- 1) NAAC (National Assessment and Accreditation Council): This agency is responsible for institutional accreditation. It focuses on whether or not the institution as a whole meets prescribed quality standards.
- 2) NBA (National Board of Accreditation): Accredits programs in engineering or architecture in a programmatic designation of quality and relevance.

At the state level, the administration of architectural education is mainly exercised through the State Department of Higher or Technical Education. The education department oversees colleges or institutions associated with state universities. Architectural and engineering colleges which do not receive central government funding are part of the state education department and thus their recognition, adherence to national and state policies and quality assurance. In that regard, the department of education appoints state educational agencies (Directorates of Technical Education DTEs or State Board of Technical Education SBTEs) which play an important part to monitor compliance or ensure institutions comply with their national and state policies. These educational agencies are responsible for implementing the policies, conducting admissions, implementing an approved curriculum, establishing examination procedures and on-going evaluation of institutional quality. These state-level agencies have the important role of being intermediary between the central agency such as the Council of Architecture (CoA) or AICTE and the colleges, as they have more knowledge of state variation, administrative capacity and state priorities. Alongside overseeing regulation and operations, DTEs and SBTEs also oversee faculty appointment guidelines, facilities standards, and academic modification. Their role is even more pronounced in the context of Tier-2 and Tier-3 cities where architectural institutions often face inadequate budgets, and require state intervention to be at par with metropolitan colleges. However, the functioning of these structures varies greatly across India, partially owing to differences in funding, political will, and bureaucratic capacity. Thus, while the state-level framework is extremely important for democratizing access to architectural education, it also creates regional variations and disparities in quality across the system.

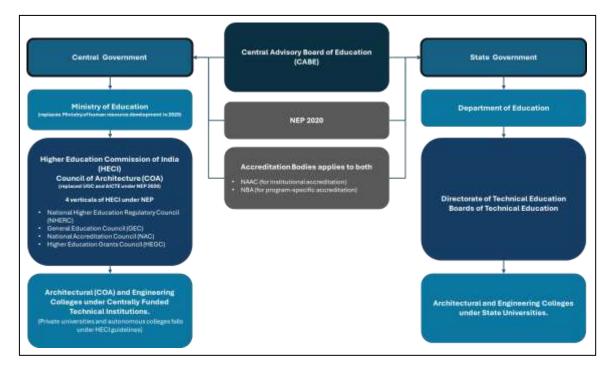


Figure 1: Governance Structure of Architectural and Engineering Education in India under NEP 2020

# 5. Institutional Framework and Governance Structure of Architecture Education in India

The image of the image provides an overview of the regulatory, institutional and academic relationships within in architecture education in India. It maps the variety of regulatory bodies, as well as the various levels of institutional and academic frameworks that govern support and teach architecture education. The core of regulatory and statutory control is provided by the Council of Architecture (COA) under the Architects Act of 1972. The COA regulates the education and practice of architecture in India. Within the COA, it monitors and sets standards for architectural institutions, including but not limited to the structure of the course, infrastructural requirements and facilities, as well as norms for faculty. As well as COA there is AICTE as a supporting education body although generally interfacing where there are technical or interdisciplinary programs involved. For funding and academic recognition of programs particularly with autonomous and deemed universities, the jurisdiction extends to the UGC (University Grants Commission). Under the academic framework are state level institutions such as VTU (Visvesvaraya Technological University) and KSHEC (Karnataka State Higher Education Council) they provide specific roles for academic planning and implementation as the nodal agencies in academic certification at the state level. They are accountable for exiting academic curricular frameworks, overseeing appropriate examination applications and supporting research activities.

Architecture programmes are offered by government aided colleges, private unaided colleges, deemed/university and autonomous institutions, all of which have the required control of the Council of Architecture (COA) to ensure programme recognitions. Various institutions such as National Institutional Ranking Framework (NIRF) and National Assessment and Accreditation Council (NAAC) use defined quality parameters to evaluate and rank at the institutional level. In addition, there are various supporting bodies like GRIHA, IGBC and IIA that provide co-curricular engagement, certifications and industry interactions. Institutional governance is expressed in terms of assemblies such as the Principal/Director, Academic Council, Board of Studies and Governing Councils seen in academic institutions where there is oversight in terms of academic integrity and awareness of curriculum relevance and continuous institutional evolution. Additional faculty structured bodies and research cells also have a major role in architecture education in terms of interdisciplinary and innovations, to help support pedagogy. Architecture institutional structure provides elements that ensure architecture education in India remain dynamic, qualitative and related to academic standards for higher education while also adheres to practice implications set by professional norms. Deeper philosophical and pedagogical implications are sustained by the architecture community in India.

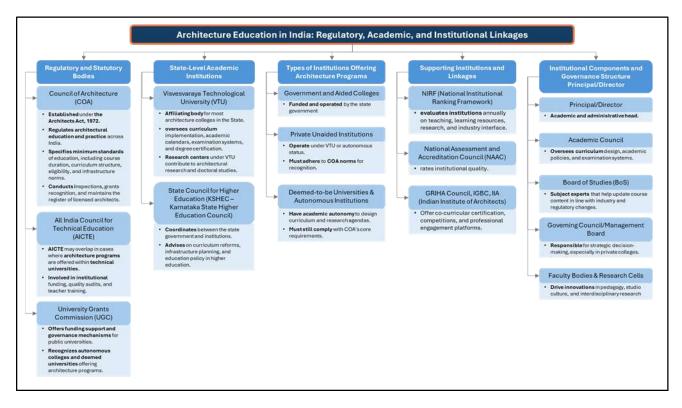


Figure 14: Architecture Education in India: Governance and Institutional Framework

# 6. Challenges

#### 6.1. Curriculum and Institutional resource gaps

Despite the transformative potential of NEP 2020, the education of architects in India continues to be bound and structured by rigidly defined curricula and policy ambitions that are disconnected from the realities of the classroom. Many programs remain bound by uniformly adopted syllabi which have insufficient space for indigenous knowledge systems, integrated interdisciplinary knowledge, or practice linked learning. This rigidity entrenches the divide between the academy and professional practice, as well as limiting engagement with contemporary urban and environmental issues. Adding to these existing challenges, disparities in access to resources across institutions (particularly across state public universities in Tier-2 and Tier-3 cities) further complicate the matter. These institutions often lack sufficient funding for studios, outdated technology for laboratories, and limited digital facilities for system aligned access to existing education. As a result, these institutions cannot provide an experiential pedagogy, leading to inequitable outcomes in comparison metropolitan institutions. Practitioners also know of inequalities in regions with regard to the use of technology and technology-related infrastructure. Due to inhibited resources, innovations in pedagogy are blocked which entrenches systemic inequality in the delivery of architectural education nationally.

#### 6.2. Faculty and Research Constraints

The shortage of qualified faculty continues to be a major challenge for architecture education. Often schools do not have faculty who are specialists in emerging areas of high demand such as digital design, data-enabled planning, building performance and sustainability, resulting in curriculums that are mostly theoretical and divorced from practice. National reviews of higher education along with regional reviews continually highlight not only the shortage of faculty but the issues of quality and engagement in schools or programs with high teaching loads. Given the lack of incentive in research-oriented teaching, faculty fail to produce innovative and investigative scholarship, have the time or inclination to engage in research in their discipline and there is not enough faculty interest in knowledge production. The absence of academic research threatens all aspects of research production, industry connections, and preparing students for professional contexts that demand technical skills and flexible practices. Architecture education is at risk of remaining a static system. If not addressing faculty recruitment and development and research support architecture education cannot adequately produce graduates with the competencies demanded by constantly changing urban, technological and environmental conditions.

#### 7. Results And Discussion

Geographic differences and infrastructure inadequacies remain a central barrier to architectural education expansion in Karnataka at Tier-2 and Tier-3 cities. Architectural educational institutions in these areas are typically under-equipped and operate with an under developed studio, poor laboratories and oversights in facility maintenance that creates a completely different higher educational context than metro regions. Such systemic inadequacies affect the operation of experiential pedagogy that breeds creativity, promotes innovation, and cultivates school pride and overall student performance. Illustrative responses from institutional profiles and student media surveys share a common thread of frustration over inadequate and disappointing learning spaces, demonstrating basic neglect of architectural schools similar to engineering colleges across non-metro wide regions.

Regulatory fragmentation also contributes to the disjointedness of architectural education, in addition to the disparities with respect to infrastructure. A body such as the Council of Architecture (CoA) with respect to architectural education superimposes many other overlapping competent authorities such as AICTE and UGC, thus causing confusion, adding extra layers of administration to sense-of-governance, and developing locked in delay with respect to the accreditation and type of curriculum. While the CoA ought to remain the competent authority for architectural education, it may be argued that AICTE and UGC overly govern those the authority of AICTE and regulate courses that demonstrate the authority of AICTE; contributing to additional layers of bureaucracy and stultifying innovative curriculum development. Government

colleges also do not have the benefits of many autonomous government colleges. In Table 7, we see that only 11% of institutions in Karnataka operate as autonomous institutions despite NEP 2020 calling for increasing decentralization of government directed institutions. This lack of institutional autonomy does not allow higher education institutions any degrees of pedagogical freedom or to innovate from within their own curriculum, rendering any responsiveness of education to local context nonexistent.

Additionally, faculty shortages and limited strategies to integrate 'real' and 'research-based' learning exasperates the situation. There are institutions across the higher education sector that struggle to recruit qualified faculty, particularly in practice-led and emerging areas of curriculum such as digital design, sustainability, and advanced technologies. This means curricula are more theoretic and have less applied, practice-based learning opportunities. Further, by excluding structured opportunities for fieldwork, research projects and community involvement, architectural education is isolated from the social and cultural contexts of their work. Consequently, graduates are deprived of professional readiness, civic engagement, and critical skills to deal with complex, modern urban and environmental problems.

# 8. Conclusion

The study confirms that there are systemic constraints that inhibit architecture education from achieving the intent of the National Education Policy (NEP) 2020, despite providing transformational ambitions for architectural education in India. Significant regional disparities in infrastructure, fragmented control and regulation with regard to CoA, AICTE, UGC, limited institutional autonomy, significant shortfalls in qualified faculty; lack of research-informed, practice-based, or integrated pedagogy, disregard for meaningful engagement with the community, etc., marked the terrain of architecture education limiting the ability to educate graduates for contemporary professional and societal scenarios. The gaps identified in this study suggest that the NEP has not yet been translated into a coherent, equitable and practice-responsive architecture education ecosystem.

In order to proceed, architectural education in India needs to rethink itself, through structural interventions that enable regulatory clarity, improved institutional autonomy, and stronger connections between academia, industry and communities. The disparity between resource-rich metropolitan institutions and resource-poor institutions in tier-2 and tier-3 cities must be particularly addressed to promote equitable access and quality. Faculty development, research support, and paradigmatic recognition of new technologies and transnational pedagogies must be prioritized to combat the academy-profession divide. Ultimately, to realize the market and social aims of NEP 2020, architectural education must prioritize flexibility, interdisciplinarity, practice-linked learning: by transforming professionals into socially responsible, environmentally aware "professionals" that support India's built environments and urban future.

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