



AI Governance in Indian Higher Education: A Critical Analysis of NEP 2020 and Emerging Digital Frameworks

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Abstract- The swift incorporation of Artificial Intelligence (AI) into Indian higher education has come to define one of the major policy issues in the 21st century. NEP 2020 – hailed by many scholars as a path-breaking reform document – outlines a visionary policy framework that emphasizes technological transformation of the higher education sector. However, the governance architectures required to govern the use of AI from the perspectives of ethics, regulation, and institutional capacity-building are still in their nascent stages. This paper seeks to examine how far NEP 2020, along with the related digital policy frameworks such as NDEAR, SWAYAM, and the National AI Strategy, have succeeded in addressing the key challenges posed by AI in higher education. Based on a discourse analysis of policy documents coupled with a review of relevant literature, this study finds the presence of critical weaknesses in India's AI governance architecture, including the lack of an independent regulatory agency, inadequate emphasis on algorithmic transparency, and insufficient policy measures for equitable AI access among castes, genders, and regions. This paper concludes by emphasizing the need for a democratic, socially just and participatory approach to governance of AI in Indian higher education.

Keywords: AI governance, NEP 2020, higher education India, digital policy, algorithmic accountability, NDEAR, EdTech

I. Introduction

The National Education Policy of 2020 in India has been described as the most comprehensive policy document regarding education in India since 1986. This document envisages an education system that is technologically integrated and multidisciplinary and can help meet the challenges of a knowledge-based economy in the contemporary world. The NEP 2020 clearly advocates the incorporation of artificial intelligence and machine learning into the processes of teaching, administration, and research in educational institutions. However, many scholars and organizations within civil society have pointed out that the commitment to digital transformation does not go hand-in-hand with the development of an adequate governance framework.

The present paper contributes to policy analysis and political science literature in that it evaluates the existing and upcoming digital policies of India in the regulation of AI within higher education institutions. The key research questions raised by this paper include: How does NEP 2020 regulate AI in higher education? What are the major gaps within the developing digital education policies of India? What governance principles should be considered while developing a democratic AI policy in higher education institutions of India?

The structure of the paper is as follows: Section 2 explains the research objective; Section 3 describes the research methodology; Section 4 includes literature review; Section 5 involves the critical analysis of NEP 2020; Section 6 covers conclusions and policy suggestions.

II. Research Objectives

The research will be based on the following specific objectives:

1. An analysis of the terms of NEP 2020 concerning artificial intelligence and digital technology in Indian higher education.
2. Assessment of the potential and limitations of India's digital education strategies (NDEAR, SWAYAM, national strategy on AI) in ensuring good AI governance.
3. Identification of the structural problems associated with AI governance issues such as algorithmic transparency, privacy protection, and equitable access to Indian higher education.
4. Creation of a normative model of democratic and socially responsible AI governance in Indian higher education.



III. Research Methodology

The research design used in this research is that of qualitative research through the use of the methodology called policy discourse analysis. According to Bacchi (2009) and Fischer (2003), policy discourse analysis views policy texts not only as mere technical tools but also as ideological tools that reveal certain power structures and visions of the social order. Through analyzing the problems that have been described as being solved through the use of AI according to NEP 2020, as well as those that have been left untouched, the above methodology enables a critique of governance imagination.

The primary sources include NEP 2020 (Ministry of Education, Government of India), the NDEAR architecture model, National Strategy on Artificial Intelligence (NITI Aayog, 2018), and UGC guidelines regarding AI and EdTech. The secondary sources include peer-reviewed journal papers, policy reports by UNESCO and OECD, and civil society organizations in India. Content analysis was used to extract themes related to governance, gaps in discourse, and ethical considerations within the texts.

It should be noted that the study does not involve any primary data gathering through either surveys or interviews. It is clearly identified as a conceptual and critical analysis of policy issues, making an addition to the rapidly growing body of literature dedicated to AI governance in the Global South as opposed to the empirical literature in social sciences.

IV. Review of Literature

4.1 AI in Higher Education: Global Perspectives

There has been a remarkable growth in research literature pertaining to AI in higher education. In a detailed study of the use of AI in education around the world, Holmes et al. (2019) provide an exhaustive list of tools related to personalized learning, intelligent tutoring systems, automated grading, and learning analytics. Although acknowledging the groundbreaking possibilities presented by AI tools, the authors point out that the implementation of AI in education moves much faster than any governance framework designed to address the concerns related to the issue—a problem that now forms an integral part of international policy discussions (UNESCO, 2021).

The OECD (2020) emphasizes the need to take a human-centered approach to AI in education, stressing the importance of transparency, accountability, and inclusiveness. In its Recommendation on the Ethics of AI, UNESCO (2021), which marks the first-ever global normative instrument for AI ethics, calls upon its member countries to adopt national regulatory frameworks ensuring learner rights, protecting privacy, and preventing algorithmic discrimination.

4.2 NEP 2020 and Digital Transformation

Various studies have presented varying assessments of the digital provisions in NEP 2020. Supporters of NEP 2020, like Tilak (2020) and Mukhopadhyay (2021), perceive the digital focus in the policy as a necessity and a progressive solution to the educational deficiency in India. According to Tilak (2020), the multipronged stakeholder approach and the recognition that technology must be used to enhance teaching are praiseworthy aspects of the policy.

Critics, on the other hand, point out significant drawbacks. According to Majumdar (2021), the digital aspect of NEP 2020 may perpetuate social disparities since it assumes a high degree of technological access and literacy among students in India, especially in rural areas and in marginalized populations due to casteism and gender discrimination. Bhatia and Bhatt (2022) argue that the policy's focus on technology is primarily aspirational and lacks regulations for the actual use of artificial intelligence technologies in schools and colleges.

4.3 AI Governance and Political Science

From the perspective of political science, the emerging challenges in AI governance have posed new problems in existing regulatory, accountability and democratic participatory systems. According to Dafoe (2018), there are three primary challenges that AI poses to governance: safety and security concerns, disruption of the economy, and issues of power and control. In the context of education, these can be understood to mean challenges related to market domination by EdTech firms, use of AI for surveillance and evaluation purposes, and academic freedom and institutional independence.

Ramanathan and Arora (2022) conduct an analysis of the political economy of EdTech in India, arguing that government support for private, AI-backed platforms like SWAYAM and DIKSHA amount to regulatory capture wherein the commercial priorities of the business sector outweigh pedagogical values. Absence of any



autonomous institution regulating the sector is seen as one of its major weaknesses in terms of institutional design. Drawing on these insights, this paper will take up a more detailed examination of the governance architecture of NEP 2020.

V. Critical Analysis: NEP 2020 and Emerging Digital Frameworks

5.1 NEP 2020: Promises and Governance Gaps

NEP 2020 dedicates considerable space to technology as an enabler of transformation in Indian higher education. It sets up the National Educational Technology Forum (NETF), suggests a National Digital Library, and recommends the use of AI-enabled technologies with a view to improving learning and operational efficiency. According to NEP 2020, technology holds the potential to bridge the divide that exists in quality terms between the elite institutions and the rest, ensure equitable access to superior content, and take care of the paperwork by simplifying the lives of faculty and administration.

Nevertheless, close analysis of NEP 2020 reveals the problem of governance that carries significant weight. The document does not define AI, nor does it set out a clear approach to its regulation. It does not make any mention of data protection, algorithmic transparency, or ethical issues pertaining to the use of AI for the assessment and monitoring of students' progress, or the sorting of students into different categories. The proposed NETF acts in an advisory capacity but has no regulatory functions or enforcement powers whatsoever. Thus, the NEP views AI merely as a technical tool rather than a socio-political phenomenon.

5.2 NDEAR, SWAYAM, and the Limits of Platform Governance

The National Digital Education Architecture (NDEAR), being India's most ambitious initiative in building a digital infrastructure for education, is based on a number of governance principles. Amongst other aspects, such as using open standards, data ownership, and consent, the key issues in governance include the discoverability of education material and interoperability between various educational platforms, data registries, and learning management systems. However, unlike those mentioned, NDEAR does not outline the principles of implementing AI governance in a holistic way. In particular, the problem of regulating data ownership, the governance of personalization, and data consent have been left unattended.

Similarly, despite being equipped with high-quality content, SWAYAM also faces some governance challenges related to the implementation of AI within the platform. Despite the large amount of learner data that is accumulated by the platform and its advanced nature, the specifics of using this data, the extent of learners' profiling, and the measures preventing any sort of discrimination in content provision are left undisclosed. Meanwhile, the existing Digital Personal Data Protection Act, 2023, does not cover educational data specifically.

VI. Conclusions and Policy Recommendations

This paper has shown that although NEP 2020 and India's emerging digital education frameworks mark significant progress toward a technology-enabled higher education system, they do not provide the strong AI governance structure needed for this transformation. The main gaps identified in regulatory oversight, algorithmic accountability, data protection, and equity are not just technical mistakes. They reveal a deeper governance philosophy that favors efficiency and market-driven innovation instead of democratic accountability and social justice.

The paper recommends four broad governance imperatives for Indian policymakers. First, the establishment of an independent Educational AI Regulatory Authority (EAIRA) with statutory powers to audit AI systems deployed in higher education, adjudicate complaints, and enforce compliance with national and international ethical standards. Second, the integration of algorithmic impact assessments into the procurement and deployment of AI tools in public universities, modelled on practices emerging in the European Union. Third, the enactment of a sector-specific Education Data Protection Framework that addresses the unique vulnerabilities of student data and provides meaningful consent and redress mechanisms. Fourth, the institutionalisation of participatory governance mechanisms — including student, faculty, and civil society representation — in the NETF and other digital education governance bodies.

The governance of AI in Indian higher education is ultimately a political question, not merely a technical one. How India answers it will have profound consequences for the equity, quality, and democratic character of one of the world's most consequential educational systems. This paper calls for a reorientation of India's AI in education agenda — from a discourse of technological inevitability to one of democratic choice, institutional accountability, and social justice.



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