The Indian Journal for Research in Law and Management

Open Access Law Journal – Copyright © 2025

Editor-in-Chief – Dr. Muktai Deb Chavan; Publisher – Alden Vas; ISSN: 2583-9896

This is an Open Access article distributed under the terms of the Creative Commons Attribution-Non-Commercial-Share Alike 4.0 International (CC-BY-NC-SA 4.0) License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium provided the original work is properly cited.

Indian Journal For Research in Law And Management

Task Three - Short Article

Topic - Child Rights in India

Beyond Connectivity:

Digital Inequality as a Child Rights Concern in Post-Pandemic India

- Soham Das

The COVID-19 pandemic marked a historic rupture in educational systems worldwide. In India with nearly 250 million schoolchildren affected by prolonged school closures, the sudden shift to remote learning exposed entrenched structural inequalities in digital access. While there has been a marked expansion in internet connectivity and mobile subscriptions across the country,these gains have not translated into equitable access for children, particularly those in rural, low-income, and marginalized communities. This study aims to investigate digital inequality in the context of post-pandemic India by analyzing its impact through the framework of child rights. Drawing upon the United Nations Convention on the Rights of the Child (UNCRC), constitutional provisions such as Articles 21A and 24 and legislative frameworks like the Right to Education Act of 2009, it demonstrates how unequal access to digital resources has undermined children's rights to education, protection, and participation. It evaluates governmental responses such as PM e-VIDYA, DIKSHA and the National Education Policy (NEP) 2020, while engaging with empirical data from ASER, TRAI, UNICEF and recent panel studies. By incorporating comparative international perspectives from Kenya and Brazil, the article situates India's experience within a broader global discourse on child rights in the digital era. It

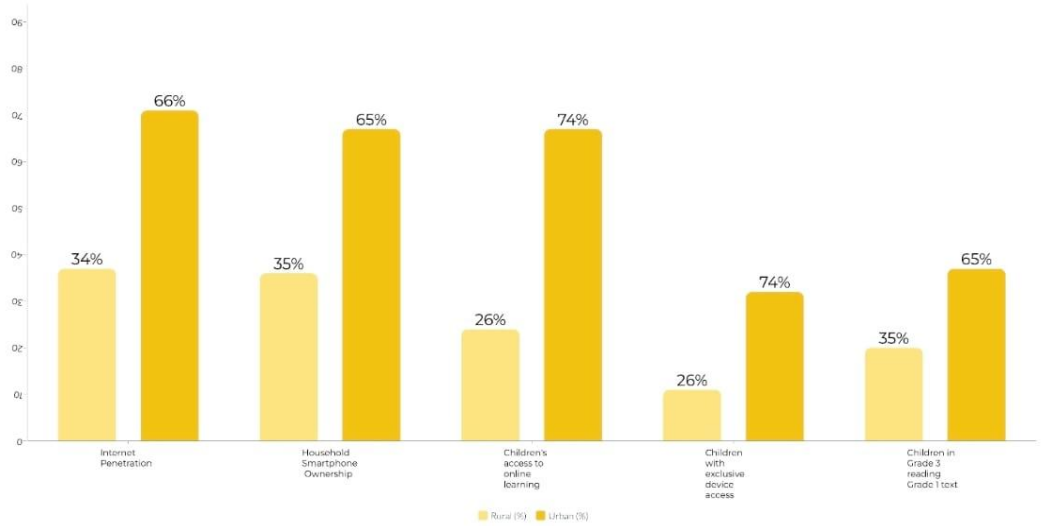
concludes by advocating a rights-based approach to digital inclusion, without which India risks seeping into a new generation of inequality.

Introduction

The COVID-19 pandemic disrupted education for more than 1.6 billion children worldwide. India, home to one of the largest student populations globally, faced the daunting challenge of sustaining education for nearly 250 million children during nationwide lockdowns in 2020 and 2021. As schools closed, the government and private actors turned to digital modalities like online classes, mobile applications, television, and radio as the primary modes for instruction. While this transition appeared innovative, it exposed the deep-rooted inequities in digital access. For many children, particularly in rural or marginalized households - the lack of devices, poor internet connectivity and inadequate home environments effectively excluded them from learning.

This exclusion had far-reaching consequences, not only for the constitutional right to education under Article 21A but also for broader child rights commitments enshrined in the UNCRC which India ratified in 1992. Digital inequality thus transcends the realm of technology. It constitutes a fundamental rights issue implicating education, protection, and participation. This article situates digital inequality within the legal and policy frameworks of India, critically evaluates governmental interventions and advances a roadmap for ensuring that the digital turn in education aligns with the rights and dignity of every child.

Literature and Context



Sources: TRAI 2024, ASER 2021, UNICEF 2021, RISE 2022

Graphical representation of rural-urban inequality in access to means of education

Early studies in education inequality highlighted disparities in device ownership and connectivity noting that less than twelve percent of Indian households owned a computer before the pandemic. During lock-downs, the Annual Status of Education Report (ASER) 2021 found that while 67 percent of urban children accessed some form of online learning, only 24 percent of rural children could do so.

UNICEF's case studies from 2021 emphasized that children in government schools, particularly those from Scheduled Caste and Scheduled Tribe backgrounds were disproportionately excluded from online education due to lack of resources and digital literacy among caregivers. A panel study by Singh and colleagues under the RISE Programme (2022) found average learning losses of 0.7 standard deviations in mathematics, disproportionately affecting rural and disadvantaged children. Comparative evidence suggests that multi-modal strategies were more inclusive. In Tamil Nadu, televised classes supplemented online platforms, while in Assam, community learning centers provided localized solutions. Conversely, states that relied heavily on online platforms without low-tech alternatives saw higher exclusion rates.

This literature underscores two key insights: first, that digital inequality compounds existing socioeconomic inequalities, and second, that the effectiveness of digital education depends not merely on infrastructure but also on pedagogical adaptability, teacher capacity, and sociocultural contexts.

Constitutional and Legal Framework

The Indian Constitution guarantees a robust framework for child rights. Article 21 guarantees the right to life and personal liberty, which the Supreme Court has expansively interpreted to include the right to live with dignity, encompassing education and nutrition. Article 21A, inserted by the 86th Constitutional Amendment in 2002, provides the right to free and compulsory education for children aged six to fourteen. Article 24 prohibits child labor in hazardous industries, while Articles 39(e) and 39(f) in the Directive Principles of State Policy require the State to ensure that children develop in conditions of freedom and dignity.

The Right of Children to Free and Compulsory Education Act, 2009, operationalizes Article 21A. The Protection of Children from Sexual Offences Act, 2012, and the Juvenile Justice (Care and Protection of Children) Act, 2015 address child protection concerns while the Prohibition of Child Marriage Act, 2006 safeguards against early marriage. During the pandemic when education shifted online, these legal guarantees were tested. Digital exclusion effectively curtailed children's access to education, raising questions about the State's compliance with constitutional and statutory obligations.

In Anuradha Bhasin v. Union of India (2020), the Supreme Court held that access to the internet is integral to the right to freedom of speech and expression under Article 19(1)(a) and the right to carry on trade under Article 19(1)(g). Though not directly about education, this judgment situates internet access within the framework of fundamental rights, strengthening the argument that digital inequality undermines constitutional guarantees.

Mapping Digital Inequality

The scale of digital inequality in post-pandemic India is stark. According to the Telecom Regulatory Authority of India (TRAI), India had approximately 955 million broadband subscribers in 2024, with 398 million in rural areas and 556 million in urban areas. However, penetration rates remain uneven: urban internet penetration exceeds seventy percent, while rural penetration lags below forty percent. Device scarcity is acute, smartphone ownership is widespread but uneven with rural households often sharing a single device among multiple members, constraining learning.

ASER's assessments revealed steep declines in literacy and numeracy post-pandemic. In 2021, the proportion of children in Grade 3 who could read a Grade 1 text fell from 27 percent in 2018 to 20 percent. Singh et al. (2022) reported learning losses equivalent to an entire year of schooling in mathematics, disproportionately borne by government school children. Gender disparities exacerbated these challenges. Girls faced unique disadvantages, especially in underprivileged households with limited devices whilst boys were prioritized for access to online classes. Surveys documented that girls were often diverted into domestic labor during lockdowns, exacerbating risks of dropout and early marriage.

Children with disabilities were further marginalized as digital platforms lacked accessibility features, undermining the rights guaranteed under the Rights of Persons with Disabilities Act, 2016 and Article 23 of the UNCRC. Thus, the digital divide intersected with poverty, gender, caste and disability to deepen inequalities.

Governmental Interventions

In response to the crisis, the Indian government launched PM e-VIDYA in May 2020, integrating digital education across online, television, and radio platforms. The DIKSHA portal served as a central repository of e-content, accessible in multiple languages. While innovative, its effectiveness was constrained by device and connectivity gaps. The National Education Policy 2020 envisions a digitally integrated education system with a proposed National Educational Technology Forum

(NETF) to guide the process. However, without bridging the digital divide, NEP's goals risk reinforcing inequalities.

State-level innovations varied in impact. Tamil Nadu's televised "Kalvi TV" reached children without internet access, while Assam developed neighborhood learning hubs. Kerala leveraged its higher digital literacy rates to implement blended learning effectively. These comparative experiences suggest that multi-modal approaches are more equitable than digital-only models.

Digital Inequality as a Rights Violation

The pandemic has made clear that digital inequality is a rights issue, not merely a technological challenge. Denial of digital access during school closures effectively denied millions of children their fundamental right to education. This contravenes both Article 21A of the Indian Constitution and India's obligations under Article 28 of the UNCRC. Children cut off from schools also lost access to protective mechanisms such as midday meals and teacher oversight. Simultaneously, increased online exposure without safeguards heightened risks of cyberbullying and exploitation, implicating POCSO obligations. Digital inequality further silenced children's voices in digital forums, violating their right to be heard under Article 12 of the UNCRC. In this sense, the digital divide in India is not only a question of technological access but a violation of substantive rights that shape children's development and dignity.

Comparative International Perspectives

India's experience is mirrored globally, particularly in the Global South, where structural inequalities made digital education uneven and exclusionary. In Kenya, prolonged school closures affected nearly 17 million learners, with fewer than one-quarter of rural households reporting access to consistent electricity and digital devices. The government relied heavily on radio and television lessons developed by the Kenya Institute of Curriculum Development (KICD), supplemented by printed packets for households without devices. While these measures extended reach, rural children, particularly in pastoralist communities, remained excluded. Unlike India,

Kenya prioritized low-tech approaches, emphasizing accessibility over digital sophistication.

Brazil provides another instructive case. With vast regional disparities akin to India, Brazilian states attempted to integrate online platforms with television-based instruction. São Paulo and Rio de Janeiro launched dedicated educational television channels and partnered with telecom companies to provide subsidized data packages. However, poorer northern states such as Amazonas and Maranhão lagged far behind, with dropout rates spiking. A World Bank study found that learning losses were most severe among the poorest quintile, echoing patterns observed in India.

These examples underscore that digital inequality is a global child rights concern. They reveal that while internet-based solutions are essential for long-term transformation; radio, television and public–private partnerships in data provision can play a crucial role in bridging immediate gaps. For India, the lesson is two-fold: first, that equitable policy must embrace multi-modal learning strategies beyond internet-based platforms and second, that partnerships with private actors in the telecom sector may be necessary to ensure affordability and inclusion.

Conclusion

The pandemic has revealed that digital inequality in India is not merely a technological divide but a structural barrier to realizing child rights. Despite constitutional guarantees under Article 21A and statutory protections under the Right to Education Act, millions of children were excluded from learning during school closures. Governmental initiatives such as PM e-VIDYA and DIKSHA expanded access to digital resources but could not overcome the entrenched socio-economic disparities that shaped who could actually benefit.

Comparative evidence from Kenya and Brazil demonstrates that this crisis is global but also that solutions exist. Radio and television, despite being “low-tech,” remain highly effective in contexts of limited internet penetration. Brazil’s experiment with subsidized data packages offers a model of public–private cooperation that India has

yet to fully adopt. Unless India integrates these lessons and adopts a rights-based framework for digital inclusion, the promise of education will remain unrealized for its most vulnerable children.

A digitally inclusive future requires not only investment in infrastructure and devices but also the embedding of equity and child rights at the heart of policy. Without such commitments, digital education risks entrenching the very inequalities it was meant to overcome, producing a generation for whom education was promised but denied in practice.

References

1. UNICEF, COVID-19: Are Children Able to Continue Learning During School Closures? (2021).
2. UNICEF India, Case Study: Education During COVID-19 (Oct. 2021).
3. Annual Status of Education Report (ASER) Centre, ASER 2021: Annual Status of Education Report.
4. RISE Programme, Singh et al., COVID-19 Learning Loss and Recovery: Panel Data Evidence from India (2022).
5. K. Jafar, Digital Divide and Access to Online Education in Tamil Nadu and Assam (2023).
6. Francis Coralie Mullin v. Administrator, Union Territory of Delhi, (1981) 1 SCC 608.
7. Anuradha Bhasin v. Union of India, (2020) 3 SCC 637.
8. Telecom Regulatory Authority of India, Performance Indicator Report (Mar. 2024).
9. Annual Status of Education Reports (2024-2025)
10. Ministry of Education, Government of India, PM e-VIDYA and DIKSHA Portal (2020).
11. UNESCO, Education and COVID-19 in Kenya: The Impact on Learners (2021).
12. Government of São Paulo Archives (2021).
13. World Bank, Learning Losses in Brazil: Evidence from the Pandemic (2022).

*****