

## DIGITAL DIVIDE AS A CHALLENGE IN TRANSFORMING INDIA THROUGH INTERNATIONALIZATION OF EDUCATION

\* Dr. Neelu Arora

\* Assistant Professor, Khalsa College of Education, Ranjit Avenue Amritsar (Punjab)

### Abstract

The internationalization of education has emerged as a significant driver for global competitiveness, knowledge sharing, and sustainable development. In India, the potential for leveraging international educational practices and collaborations is immense. However, the benefits of this transformative process are not equitably distributed due to the prevailing digital divide. This paper explores the digital divide as a critical impediment to the internationalization of education in India. It discusses the concept and dimensions of the digital divide, the status of international education in India, and how digital inequity hampers access, participation, and outcomes in globally integrated learning environments. Drawing on policy documents, statistical data, and case studies, this paper provides an analytical perspective on the socio-economic, infrastructural, and gender-based disparities influencing digital access. It incorporates an examination of institutional frameworks and cultural dimensions affecting technology use in education. Finally, it proposes recommendations for policy reform, technological investments, and inclusive strategies to bridge the digital divide, thereby ensuring that India can fully harness the potential of international education in its path toward transformation.

**Keywords:** Digital Divide, Internationalization of Education, India, Higher Education, Digital Inclusion, Educational Transformation, Policy Reform, ICT Infrastructure

**Copyright © 2025 The Author(s):** This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial Use Provided the Original Author and Source Are Credited.

### Introduction:

Education has always been a cornerstone of socio-economic development and cultural integration. In recent decades, the concept of internationalization of education has gained significant traction. It refers to the process of integrating an international, intercultural, or global dimension into the purpose, functions, and delivery of education (Knight, 2015). For a country like India, internationalization presents opportunities for academic excellence, innovation, cross-border collaboration, and global employability. However, this transformative vision is significantly challenged by the digital divide, which refers to the gap between individuals who have access to modern information and communication technologies (ICTs) and those who do not (van Dijk, 2020). India, with its demographic diversity and socio-economic disparities, exhibits a pronounced digital divide that affects both urban and rural populations. While metropolitan cities are witnessing a surge in digital learning and international collaborations, large sections of the population remain digitally marginalized. The integration of



digital platforms in education, especially after the COVID-19 pandemic, has become essential, but its uneven distribution poses significant challenges (UNESCO, 2021).

This paper aims to explore the multifaceted nature of the digital divide in India, examine its implications on the internationalization of education, and propose strategic interventions to bridge the gap. By doing so, it seeks to contribute to the discourse on inclusive and sustainable educational transformation in the digital age.

### **Understanding the Digital Divide:**

The term "digital divide" encompasses the socio-economic inequalities in access to, use of, and impact of ICTs. It can be categorized into three dimensions: access divide (availability of devices and connectivity), usage divide (how technology is used), and quality-of-use divide (the effectiveness of technology use) (van Dijk, 2020).

In India, the digital divide is influenced by multiple factors—geographical, economic, gender, and social. According to the Internet and Mobile Association of India (IAMAI, 2023), only about 45% of the rural population has access to the internet, compared to 72% in urban areas. The gender gap is also significant; a report by GSMA (2022) indicates that women are 26% less likely than men to use mobile internet in India. Cultural barriers, digital illiteracy, and language limitations compound these challenges (Roy & Kumar, 2022).

Economic disparities exacerbate access issues. Many low-income households cannot afford internet services or digital devices (Pew Research Center, 2021). The COVID-19 pandemic laid bare these inequities, with millions of students unable to attend online classes due to lack of infrastructure and support (Azim Premji Foundation, 2021; UNICEF, 2021).

Digital literacy also remains a pressing concern. A NITI Aayog report (2022) highlights that less than 30% of Indians possess basic digital skills necessary for educational and economic activities. Without addressing these foundational issues, any effort at educational internationalization will be exclusionary.

### **Internationalization of Education in India:**

India's efforts toward internationalization of education have gained momentum since the economic liberalization of the 1990s. The government and academic institutions have increasingly recognized the need to align educational practices with global standards. Initiatives such as "Study in India," credit transfer frameworks, and international university collaborations are aimed at enhancing the country's global academic presence (Ministry of Education, 2020).

The National Education Policy (NEP) 2020 is a major milestone in this regard. It emphasizes internationalization through curriculum reforms, international faculty recruitment, dual degree programs, and foreign university campuses in India (NEP, 2020). Furthermore, the policy encourages Indian universities to climb global rankings by fostering research collaborations and adopting global best practices.

Technology is central to this agenda. Platforms like SWAYAM, DIKSHA, and National Digital Library of India (NDLI) are envisioned as tools to democratize access to global knowledge. MOOCs, virtual exchange programs, and AI-enabled education models are examples of how technology is being used to internationalize higher education (Aithal & Aithal, 2020).

However, a large segment of students and educators remains outside this digital ecosystem. Unequal access to resources restricts participation and leads to fragmented educational experiences, thereby undermining the goals of internationalization.

### **Intersection of the Digital Divide and Internationalization:**

The digital divide critically hampers India's vision of internationalized education. While digital platforms open new avenues for learning, collaboration, and global exposure, these benefits are limited to those who have the means to access and utilize them effectively.

In rural and remote regions, where basic internet infrastructure is lacking, students are often unable to participate in digital classrooms or access international learning materials. A study by the Centre for Policy Research (2021) found that over 60% of rural students faced disruptions in education during the pandemic due to lack of internet and devices. Furthermore, tribal areas in Odisha, Jharkhand, and Chhattisgarh show severe underutilization of digital resources, highlighting regional inequalities (KPMG, 2022).

Even in urban areas, socio-economic inequalities determine the extent of international exposure. Elite institutions with international collaborations are predominantly located in metropolitan cities, creating an urban-rural divide within the academic space (Agarwal, 2009).

Additionally, language barriers, limited digital literacy, and a lack of culturally relevant content make internationalized content inaccessible to a significant proportion of Indian learners (Tummala-Narra, 2021).

### **Challenges and Barriers:**

Numerous systemic and infrastructural barriers inhibit digital inclusion in India. The BharatNet project, which aims to connect all 250,000-gram panchayats with high-speed broadband, has missed multiple deadlines and suffers from bureaucratic and logistical delays (Telecom Regulatory Authority of India [TRAI], 2023).

Electricity shortages in many states further restrict access to digital tools. According to the Ministry of Power (2022), over 20% of Indian villages still face irregular power supply. This makes consistent use of ICT tools in education unfeasible in many rural contexts.

Socio-cultural factors also play a role. Gender norms in conservative regions limit women's and girls' access to digital spaces. GSMA (2022) reports that digital gender gaps persist due to restrictions on device ownership and online mobility.

Institutionally, many schools and colleges lack digital infrastructure, updated curricula, and trained faculty to engage in international programs. UNESCO (2021) stresses that digital transformation in education must be accompanied by institutional reforms, including teacher training and curriculum modernization.

### **Policy and Strategic Interventions:**

A multi-stakeholder and multilayered approach are essential to bridge the digital divide and ensure inclusive internationalization of education.

Government initiatives like PMGDISHA aim to improve digital literacy among rural populations. However, these need to be scaled up with better monitoring and integration with educational institutions (NITI Aayog,

2022). The expansion of BharatNet and state-level programs like Kerala's KITE initiative are examples of how decentralized models can work effectively (Government of Kerala, 2022).

Public-private partnerships (PPPs) can catalyze change. Companies like Reliance Jio and Airtel have played a significant role in increasing internet penetration. Collaborations between EdTech firms and universities can bring down costs and localize content (Deloitte, 2022).

At the institutional level, universities must develop inclusive ICT policies, offer training to faculty and students, and promote multilingual and culturally sensitive learning content. International donors and multilateral organizations should support capacity building and infrastructure development in under-resourced areas.

### Conclusion:

The internationalization of education is a strategic imperative for India as it seeks to position itself as a global knowledge hub. However, this goal cannot be realized unless the digital divide is comprehensively addressed. Bridging the digital divide requires coordinated action across multiple fronts—policy, infrastructure, pedagogy, and cultural change.

Equitable access to digital tools and international learning opportunities can help unlock the potential of India's demographic dividend and foster inclusive development. Without such efforts, internationalization may reinforce existing inequalities rather than resolve them. A just, digitally empowered education system is thus key to India's global educational transformation.

### References:

1. Agarwal, P. (2009). *Indian higher education: Envisioning the future*. SAGE Publications.
2. Aithal, A., & Aithal, P. S. (2020). *Digital education model for higher education institutions*. *International Journal of Management, Technology, and Social Sciences*, 5(1), 138–151. <https://doi.org/10.47992/IJMTS.2581.6012.0102>
3. Azim Premji Foundation. (2021). *Myths of online education*. <https://azimpremjifoundation.org>
4. Centre for Policy Research. (2021). *Education in the time of COVID-19*. <https://www.cprindia.org>
5. Deloitte. (2022). *India EdTech landscape*. <https://www2.deloitte.com>
6. Government of Kerala. (2022). *KITE initiative*. <https://kite.kerala.gov.in>
7. GSMA. (2022). *The mobile gender gap report 2022*. <https://www.gsma.com>
8. Internet and Mobile Association of India. (2023). *Digital in India report 2023*. <https://www.iamai.in>
9. Knight, J. (2015). *Internationalization: A decade of changes and challenges*. *International Higher Education*, (50), 6–7. <https://doi.org/10.6017/ihe.2008.50.8008>
10. KPMG. (2022). *Digital learning and rural inclusion*. <https://home.kpmg/in>
11. Ministry of Education. (2020). *National education policy 2020*. Government of India. <https://www.education.gov.in>
12. Ministry of Power. (2022). *Rural electrification status report*. <https://powermin.gov.in>
13. NITI Aayog. (2022). *Strategy for New India @75*. <https://www.niti.gov.in>
14. Pew Research Center. (2021). *Internet access and use in emerging economies*. <https://www.pewresearch.org>



15. Roy, S., & Kumar, V. (2022). Addressing digital literacy in India. *Journal of Digital Learning*, 8(2), 25–34.
16. Telecom Regulatory Authority of India. (2023). Status report on BharatNet. <https://www.trai.gov.in>
17. Tummala-Narra, P. (2021). Cultural dimensions in education technology. *Cultural Psychology Review*, 13(1), 87–104.
18. UNESCO. (2021). *Reimagining our futures together: A new social contract for education*. <https://www.unesco.org>
19. UNICEF. (2021). *COVID-19 and school closures: One year of education disruption*. <https://www.unicef.org>
20. van Dijk, J. (2020). *The digital divide*. Polity Press.

***Cite This Article:***

**Dr. Arora N. (2025).** *Digital Divide as a Challenge in Transforming India Through Internationalization of Education*. In **Educreator Research Journal: Vol. XII (Issue II)**, pp. 161–165.

**Doi:** <https://doi.org/10.5281/zenodo.15705388>