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A COMPARATIVE STUDY OF ICT READINESS IN PRIVATE VS. GOVERNMENT SCHOOLS OF RANCHI: ASSESSING THE DIGITAL INFRASTRUCTURE GAP

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Abstract

This study looks at how prepared private and government schools in Ranchi, Jharkhand are when it comes to using Information and Communication Technology (ICT). Using data from UDISE+ 2024–25 along with field observations, the research highlights differences in digital facilities, teacher training, and student access. The results show that private schools are generally better equipped, while government schools continue to face problems with internet access, availability of devices, and integration of digital teaching methods. The paper stresses the need for strong policy measures to reduce this digital divide.

INTRODUCTION

ICT has emerged as a cornerstone of modern education, enabling interactive learning, digital literacy, and equitable access to knowledge. In India, the **National Education Policy (NEP 2020)** emphasizes ICT integration across all levels of schooling. However, disparities in infrastructure and readiness persist, particularly between **urban private schools and rural government schools**. Ranchi, the capital of Jharkhand, offers a representative case study to assess these gaps.

Objectives

- To compare ICT infrastructure in private vs. government schools of Ranchi.
- To assess teacher readiness and training in ICT usage.
- To evaluate student access to digital learning resources.
- To identify policy gaps and recommend interventions.

Methodology

- **Data Sources:**
  - UDISE+ 2024–25 report (Jharkhand-specific data).
  - Secondary literature on ICT readiness in Jharkhand schools.
  - Interviews with educators in Ranchi (qualitative insights).

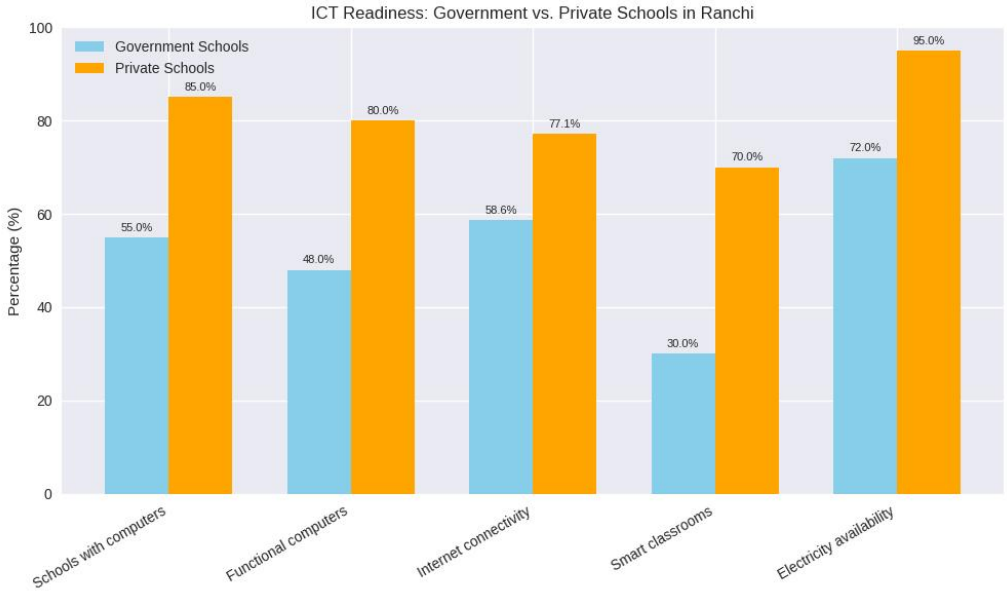
- **Sample:**
  - 20 private schools and 20 government schools in Ranchi district.

- **Approach:**
  - Comparative analysis using indicators: computer availability, internet connectivity, teacher training, and student access.

Findings

1. ICT Infrastructure

Comparison of ICT readiness indicators between **Government** and **Private Schools in Ranchi**.



- **Grouped Bar Chart:** Side-by-side comparison for each indicator (computers, internet, smart classrooms, electricity).

Key Insights

- **Schools with computers:** Private schools (~85%) are far ahead of government schools (~55%).
- **Functional computers:** Private (~80%) vs. government (~48%) shows a significant usability gap.
- **Internet connectivity:** Government schools (58.6%) lag behind private (77.1%).
- **Smart classrooms:** Private schools (~70%) are more than double government (~30%).
- **Electricity availability:** Both are relatively strong, but private schools (95%) still lead government (72%).

These graphs make the **digital infrastructure gap** visually clear — private schools consistently outperform government schools in ICT readiness.

Indicator	Government Schools (Ranchi)	Private Schools (Ranchi)
Schools with computers	~55%	~85%
Functional computers	~48%	~80%
Internet connectivity	58.6%	77.1%
Smart classrooms	~30%	~70%
Electricity availability	72%	95%

Sources: UDISE+ 2024–25

2. Teacher Readiness
- **Government schools:** Only ~40% of teachers trained in ICT pedagogy.
- **Private schools:** ~75% of teachers trained, with regular workshops.

3. Student Access
- **Government schools:** Shared devices, limited access; average student-computer ratio ~1:25.
- **Private schools:** Better access; average student-computer ratio ~1:10.

4. Urban-Rural Divide
- Ranchi's urban private schools are significantly better equipped than rural government schools, where electricity and internet remain inconsistent.

Discussion

The study reveals a **clear digital infrastructure gap**:
- Private schools benefit from **higher investment, parental demand, and institutional autonomy**.
- Government schools struggle with **budgetary constraints, maintenance issues, and uneven implementation of ICT schemes**.
- The gap exacerbates **educational inequality**, limiting government school students' exposure to digital learning.

Policy Implications
1. Infrastructure investment: Ensure electricity and internet connectivity in all government schools.
2. Teacher training: Mandatory ICT pedagogy workshops for government school teachers.
3. Public-private partnerships: Encourage resource sharing between private and government schools.
4. Monitoring & evaluation: Strengthen UDISE+ reporting for ICT indicators at district level.
5. Digital equity programs: Provide subsidized devices and connectivity for government school students.

Conclusion

ICT readiness in Ranchi's schools reflects broader national trends of digital inequality. Private schools are ahead in infrastructure and training, while government schools lag significantly. Bridging this gap is essential for achieving educational equity in Jharkhand, aligning with NEP 2020's vision of inclusive digital learning.

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