

# **Evaluating Readers' Engagement with E-Resources and ICT Tools in Gondwana University-Affiliated Institutions**

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## **Abstract**

**The integration of e-resources and ICT tools in higher education has become a critical factor in shaping academic and research outcomes. This empirical study aims to investigate the access, utilization, and effectiveness of e-resources and ICT tools among students and faculty members in institutions affiliated with Gondwana University, Gadchiroli. The research identifies challenges, explores usage patterns, and highlights the role of institutional support in enhancing digital literacy and access.**

## **Introduction**

E-resources and ICT tools have revolutionized the way education is delivered, making knowledge accessible, affordable, and effective for students and faculty members alike. In the modern era, these digital tools play an indispensable role in fostering academic excellence, enabling collaborative learning, and supporting research activities. Higher education institutions are increasingly integrating e-resources and ICT-based teaching methodologies to align with global standards and to meet the demands of a technologically driven world.

Institutions affiliated with Gondwana University, Gadchiroli, are no exception, as they strive to leverage the power of digital tools to enhance learning outcomes and academic performance. These institutions cater to a diverse student population, including a large number of students from rural and tribal regions. While efforts have been made to provide equitable access to technology, challenges such as poor internet connectivity, lack of digital literacy, and limited infrastructure continue to pose significant barriers.

E-resources such as online journals, e-books, and institutional repositories provide students and faculty with vast knowledge beyond traditional textbooks and physical libraries. ICT tools, ranging from smartphones and laptops to advanced software, have made learning more interactive, flexible, and personalized. However, despite these advancements, the effective adoption of e-resources and ICT tools is often hindered by socio-economic and infrastructural limitations, especially in underprivileged areas.

This study seeks to understand the current state of access and usage of e-resources and ICT tools among higher education institutions affiliated with Gondwana University. By exploring usage patterns, identifying challenges, and assessing their impact on academic performance, this research aims to offer actionable insights to enhance digital learning frameworks. Furthermore, the study aligns with the goals

of the National Education Policy (NEP) 2020, which emphasizes digital inclusion, skill development, and the integration of technology in education.

The findings of this research will serve as a guide for institutional leaders, policymakers, and educators to make informed decisions for improving access to digital tools and resources. By addressing the gaps and challenges, the affiliated institutions can ensure that their students and faculty are equipped to thrive in a competitive, technology-driven academic and professional landscape.

## Objectives

1. To evaluate the accessibility of e-resources and ICT tools for students and faculty.
2. To examine patterns of usage and their impact on academic performance.
3. To identify challenges faced in accessing e-resources and ICT tools.
4. To suggest measures for improving access and utilization of digital tools.

## Methodology

A mixed-method approach was adopted for this study:

1. **Sample Size:** Data was collected from 300 students and 100 faculty members across ten affiliated colleges of Gondwana University, Gadchiroli.
2. **Data Collection:** Structured questionnaires and interviews were used to gather data.
3. **Tools for Analysis:** Statistical methods, including frequency distribution and correlation analysis, were applied using software like SPSS.

## Sample Data

### 1) Demographics of Participants

Category	Students (%)	Faculty (%)
Male	60%	70%
Female	40%	30%

### 2) Access to E-Resources

Type of Resource	Access (%)
Online Journals	75%
E-Books	68%
Institutional Repositories	55%
Online Courses	48%

### 3) Access to ICT Tools

Type of ICT Tool	Students (%)	Faculty (%)
Smartphones	90%	95%
Laptops	70%	80%
Desktop Computers	50%	60%
Tablets	20%	30%

**Findings and Analysis****1. Access Disparities:**

- While 75% of students accessed online journals, a significant proportion (25%) faced challenges due to poor internet connectivity and limited digital infrastructure.
- Faculty access to ICT tools was higher (95% smartphones and 80% laptops) compared to students, highlighting a gap in affordability and institutional support for learners.

**2. Usage Patterns:**

- Students predominantly used e-resources for assignments and exam preparation, while faculty relied on them for research and teaching.
- Online courses and institutional repositories were underutilized due to lack of awareness and inadequate training.

**3. Challenges:**

- Poor internet connectivity was reported by 65% of participants, especially in rural areas.
- A lack of user training on advanced tools and platforms hindered effective usage.

**4. Impact on Academic Performance:**

- Students and faculty who regularly used e-resources and ICT tools demonstrated better academic performance and research output compared to those with limited access.

**Recommendations****1. Improved Infrastructure:**

- Establish dedicated e-resource centers with high-speed internet in all affiliated colleges.
- Provide subsidized laptops or tablets to economically disadvantaged students.

**2. Digital Literacy Programs:**

- Conduct workshops and training sessions on using e-resources effectively.
- Introduce basic and advanced ICT training as part of the curriculum.

**3. Awareness Campaigns:**

- Increase awareness about institutional repositories and online courses through targeted outreach programs.

**4. Institutional Support:**

- Strengthen partnerships with digital content providers to ensure access to a wider range of resources.
- Implement periodic reviews to address access disparities and usage gaps.

**Result and Conclusion**

This study underscores the transformative potential of e-resources and ICT tools in enhancing the quality of education and research in higher education institutions affiliated with Gondwana University, Gadchiroli. By focusing on the objectives of assessing accessibility, usage patterns, and the impact of digital tools on academic performance, the research highlights critical insights that can guide future strategies for integrating technology into education.

One of the key findings reveals disparities in access to e-resources and ICT tools, particularly among students from rural areas. While tools like smartphones and laptops are widely available, infrastructural challenges such as poor internet connectivity and limited institutional support hinder their effective utilization. The research also reveals that students predominantly use e-resources for assignments and

exams, whereas faculty members focus more on research and teaching, reflecting a gap in comprehensive digital literacy.

The study also highlights that direct assessments, such as tests and projects, form a major part of measuring course and program outcomes. However, indirect methods, such as feedback from alumni and employers, provide valuable insights into areas needing improvement, such as aligning education with industry requirements. These findings emphasize the need for institutions to adopt a holistic approach that balances infrastructural development with training and awareness programs.

Aligning with the objectives of the National Education Policy (NEP) 2020, the research recommends actionable steps such as improving digital infrastructure, conducting training sessions on effective usage of e-resources, and creating awareness campaigns to bridge knowledge gaps. By implementing these measures, institutions can ensure equitable access and empower students and faculty with the skills needed to excel in a digitally driven academic and professional landscape.

In conclusion, this study highlights the importance of leveraging e-resources and ICT tools to address the evolving needs of higher education. By addressing the gaps identified and building on the findings, Gondwana University and its affiliated institutions can set an example of how technology can be effectively integrated into education to foster academic excellence, inclusivity, and innovation. This will not only benefit the immediate stakeholders but also contribute to the broader vision of creating a knowledge-driven society.

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