



"A Study On The Role Of Ict In School Library Services: With Reference To Jnv Bhind (Birkhadi)"

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Abstract

This research sheds light on how computer technology impacts library science and services. It brings into focus the evolving role of Information and Communication Technology (ICT) in the context of educational institutions, particularly school libraries. The research emphasizes the significant constraints faced by school libraries due to the lack of modern computer systems, poor-quality internet connectivity, and the overall absence of a robust digital infrastructure. As the world rapidly advances into the digital age, many rural schools are still struggling to catch up. This gap not only limits the efficiency of library operations but also hinders the students' ability to access timely and relevant information.

The main aim of this study is to highlight the specific challenges encountered by the library of Jawahar Navodaya Vidyalaya Bhind (BIRKHADI) during the period 2021 to 2025. Despite being a part of a well-regarded central government educational network, this institution faces serious issues in modernizing its library services. The school library suffers from limited ICT resources such as computers, updated software, and digital tools. Moreover, poor internet access acts as a barrier to utilizing online educational content, research materials, e-books, and other learning resources. These limitations make it difficult for the library to meet the expectations of today's fast-paced, digital-learning environment.

This study also explores the practical difficulties faced by students and teachers due to the underutilization of ICT in the library. With the increasing importance of digital literacy in academic success, the inability to use basic ICT services may widen the gap between rural and urban students. While initiatives like e-Granthalaya have been introduced, their implementation remains incomplete due to infrastructure and connectivity problems.

By examining the root causes of these issues, this research hopes to encourage constructive solutions and improvements in ICT infrastructure within such institutions. The study not only identifies the current shortcomings but also opens up a discussion on how these rural school libraries can be transformed into vibrant, knowledge-driven digital spaces. It underlines the urgent need for investment in technology, training for library staff, and a structured approach to make ICT an integral part of library services in remote areas like Bhind (BIRKHADI).

Keywords : ICT, school libraries, JNV, digital divide, e-Granthalaya, JNV Bhind ,ICT implementation in education, Rural education and technology, Library modernization, Educational technology, Digital infrastructure in schools, Challenges of ICT in rural areas

Introduction

The 21st century has become an era of revolution in Information and Communication Technology (ICT). From children as young as six to the elderly aged ninety-six, everyone is capable of using the internet. ICT's influence is visible in every domain—whether it's enjoying IPL matches from the comfort of home or accessing a PDF of a book. When ICT is integrated into libraries, particularly school libraries, it significantly enhances research, reference services, and overall library functions.

With the growing integration of digital technology into every aspect of life, the expectations from educational institutions have evolved as well. In earlier times, libraries were considered mere storehouses of books. However, in today's digital age, libraries have transformed into dynamic knowledge centers, equipped not only with physical books but also with access to online databases, e-books, educational portals, and digital content that fosters interactive learning. The shift from traditional to digital libraries is not just a trend but a necessity, especially in the context of school libraries where young minds are nurtured.

Residential schools like Jawahar Navodaya Vidyalayas (JNVs) place special emphasis on the use of ICT, as they are located in remote areas. The students, coming from rural backgrounds, are not permitted to use mobile phones, laptops, or other personal digital devices. In such circumstances, ICT services available within the school and its library become the only digital bridge connecting students to the wider world.

Jawahar Navodaya Vidyalayas, which aim to provide quality education to rural children, play a pivotal role in ensuring equity and excellence in the Indian education system. Due to their residential nature and restrictions on personal electronic devices, the role of a digitally equipped library becomes even more significant. The library can serve as a platform for students to explore the vast digital universe, gain access to resources for competitive exams, enhance their subject understanding, and stay connected with the advancements in technology and learning methodologies globally.

This research paper aims to explore whether students of JNV Bhind (BIRKHADI), while being part of 21st-century education, are truly able to utilize ICT services effectively and access them in a timely manner. It will also highlight the challenges and opportunities that arise during the use of ICT and strive to suggest how library services at this institution can be optimized, made more efficient, and modernized using ICT tools.

Moreover, this paper attempts to examine the ICT infrastructure currently available in the school library, how the students and faculty perceive it, and how it aligns with the vision of a modern digital learning environment. It also seeks to bring attention to the gaps that exist between policy and practice, especially in the context of rural and government-funded schools. Many such institutions struggle with issues like inadequate internet speed, lack of skilled technical staff, and insufficient funding for updating digital infrastructure.

The study also focuses on the socio-economic background of the students. Being from rural and often economically weaker sections, these students may not have access to digital devices or internet facilities at home. In such scenarios, the school's ICT resources become their only window to the digital world. Thus, it becomes imperative to examine how efficiently these resources are being utilized and what can be done to improve them.

Through this research, an attempt is made to understand not only the current status of ICT in the school library but also to propose a roadmap for future development. This includes providing recommendations for better internet connectivity, upgradation of computers and software, staff training programs, and developing ICT-integrated teaching and learning models.

In conclusion, ICT is not just a tool for modernization; it is a necessity for holistic educational development. For schools like JNV Bhind (BIRKHADI), which cater to underprivileged rural populations, a well-equipped digital library can act as a catalyst for change. It can help bridge the urban-rural divide, provide equal opportunities for growth, and empower students with the knowledge and skills required to succeed in the digital era. This research, therefore, stands as a small yet significant step toward realizing that vision.

Need for the Research

Jawahar Navodaya Vidyalayas are institutions known for delivering top academic results, especially in grades 10 and 12. These schools are a symbol of educational excellence in rural India, and they aim to nurture talented students from remote areas by providing them with quality residential schooling. In such an academic environment, libraries play a central role in fostering self-learning, research skills, and academic growth.

Understanding how ICT impacts library services in such schools is crucial in today's digital age, where technology is redefining education. Libraries are no longer just physical spaces for borrowing books — they are transforming into digital learning hubs. It becomes essential to assess how well ICT is being integrated into these services and whether it is truly benefitting students and teachers alike.

It is also important to explore how ICT can help students in the future, especially in preparing for competitive exams, accessing online study materials, and improving digital literacy. Its proper usage can

contribute not only to the academic growth of students but also to the development of the institution as a whole. Furthermore, it can play a vital role in national development by producing digitally aware and capable youth.

This research is, therefore, an attempt to analyze the present situation and offer insights into how ICT integration in school libraries can be improved to promote meaningful, inclusive, and future-ready learning experiences.

Objectives of the study

1. To assess the availability of various ICT tools and resources in the school.
2. To understand the methods of ICT resource utilization.
3. To study the impact of ICT services on students and teachers.
4. To examine how modern the library services in rural schools are, especially when the world is talking about 5G and 7G technology.
5. To identify the challenges of ICT implementation and suggest solutions.

Research Methodology

Survey

1. Experience and observation – Worked as the Library In-charge for 5 months.
2. Library records.
3. Questionnaire and interviews.

Sources of Data Collection

1. Observations and experiences during and after the service, and student feedback through questionnaires and interviews.
2. School reports and library reports.

Scope and Limitations of the Study

This study is focused on understanding the role and effectiveness of Information and Communication Technology (ICT) in the library services of Jawahar Navodaya Vidyalaya, Bhind (BIRKHADI). It explores the availability and accessibility of ICT tools within the school premises, how these tools are being utilized by students and teachers, and the overall impact on academic support and digital literacy in a rural, residential educational setting. The research aims to highlight both the opportunities and challenges in integrating ICT into library services, especially for students coming from underprivileged and remote backgrounds. It also seeks to assess how ICT can help bridge the digital divide in such institutions and offers recommendations for improvement in ICT infrastructure and practices.

However, the study does have certain limitations. It is confined to a single institution and therefore may not fully represent the conditions of all Navodaya Vidyalayas or rural schools in India. The data collected is based on a five-month period of active observation while serving as the library in-charge, which may not capture seasonal or long-term variations. Additionally, the sample size for surveys and interviews was relatively small, limited to the available students and staff. Technological limitations such as poor internet connectivity and outdated computer systems also affected the depth of ICT usage and data reliability. Furthermore, due to the absence of a digital tracking system, much of the information had to be gathered manually or through verbal responses. Lastly, the study does not include a comparative analysis with urban or better-equipped institutions, which could have provided a broader context for evaluation.

Result and discussion

1. The school and its library do not have a sufficient number of computers.
2. The library has only one computer, that too running an outdated MS-Windows version.
3. Although the library is a member of the e-Granthalaya system, only 3000 books are registered out of more than 10,000 available. This is due to the slow internet speed, as mentioned by the librarian.
4. Internet connectivity is extremely poor. For most of the year, there is no network, making any ICT-related task nearly impossible.
5. Although a barcode reader and related kit are available in the library, the traditional method is still used for issuing and returning books.

Some pictures



School library of JNV bhind (Jan 2021)



Use of ICT in JNV Bhind
(2024 dec)

Actual Use of ICT Resources

1. To upgrade and update the e-Granth alaya system.
3. To download NCERT question papers.
4. To access examination-related information.
5. To fill out competitive exam forms and take CBSE-conducted computer-based tests.
6. Office staff uses ICT for administrative work, but it is not used by the academic staff or students.

Scope for ICT Development

There is a need to identify the specific ICT requirements in library activities and services, which can be addressed only after providing adequate training and modern equipment.

Problems Encountered During ICT Usage

1. Internet connectivity is the biggest issue. Due to the school's rural location, network quality is extremely poor.
2. Technical equipment is outdated—computers are slow and software is not updated.
3. The physical structure of the library is not suitable for ICT use. For example, there is a lack of charging points and no projector.
4. The library does not resemble a modern digital library; instead, it feels more like a storage room. Students don't find it engaging or attractive.

Suggestions and Conclusion Based on Findings

1. There is a need to appoint technical staff to help maintain and run the existing ICT infrastructure smoothly.
2. New ICT equipment needs to be procured.
3. Structural improvements and necessary facilities must be provided to install and use ICT tools efficiently in the library.

Bibliography.

- Annual report of JNV bhind and document and records of library (JNV BIRKHADI).
- CBSE. (2023). *Guidelines for ICT Integration in Schools*. New Delhi: Central Board of Secondary Education.
- Kumar, K. (2021). *Library Science and ICT: A Practical Approach*. New Delhi: ABC Publishers
- Ministry of Education, Government of India. (2022). *e-Granthalaya: A Digital Initiative for Libraries*. Retrieved from <https://eg4.nic.in>
- Navodaya Vidyalaya Samiti. (2021). *Annual Report of ICT Infrastructure in JNVs*.
- Sharma, P. (2020). "Role of ICT in School Libraries: A Case Study." *Indian Journal of Library and Information Science*, 45(2), 112–118.

