

LIS TODAY
Year 2024, Volume-10, Issue-2 (DECEMBER)



Transforming School Libraries with ICT: Assessing Digital Literacy and the Evolving Role of Librarians in the Context of NEP 2020

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ARTICLE INFO

Keywords: *ICT integration, digital literacy, NEP 2020, school librarians, information management, professional development,*

doi:10.48165/lt.2024.10.2.4

ABSTRACT

This study explores the integration of Information and Communication Technology (ICT) in school libraries and its impact on digital literacy and the evolving roles of school librarians within the context of India's National Education Policy (NEP) 2020. A structured survey was conducted with 300 school librarians, teachers, and administrators from various educational institutions, including public and private, urban and rural schools. The survey aimed to evaluate the extent of ICT integration, the digital literacy levels of librarians, and how these factors influence their professional roles. The study also identifies key challenges to effective ICT integration, including infrastructural limitations and the need for enhanced professional development. These findings offer valuable insights and practical recommendations to align with NEP 2020's goals of leveraging technology to improve educational outcomes and support the evolving roles of school librarians in promoting digital literacy and managing information effectively.

Introduction

The speedy progression of Information and Communication Technology (ICT) has carried significant changes across various sectors, with education being one of the most profoundly impacted. In the contemporary educational landscape, ICT is not merely a supplementary tool but a fundamental component that reshapes how information is accessed, shared, and utilized. As educational paradigms shift towards more technology-integrated approaches, School Libraries stand at a critical juncture of transformation. Schools are very first place which impart formal education in the society through the upcoming generations. The School Libraries traditionally viewed as repositories of physical books and resources, school libraries

are increasingly evolving into dynamic digital hubs that facilitate interactive and collaborative learning environments. School libraries are crucial in helping students acquire the digital literacy skills necessary to successfully navigate the vast amount of internet information (Softskill, 2020). Within this transformative context, the role of the school librarian is undergoing a significant redefinition. Librarians are no longer just custodians of books but are becoming crucial facilitators of digital literacy and information management. They are expected to guide students in navigating the vast digital information landscape, ensuring that learners can critically evaluate and effectively utilize digital resources. This evolving role necessitates a robust understanding and integration of ICT in everyday library functions,

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from cataloging and information retrieval to supporting digital learning initiatives. Other than today's school libraries play an instructional role, teaching information literacy, media literacy, and research skills. India's National Education Policy (NEP) 2020 underscores the importance of technology in education, advocating for the integration of digital tools and resources across all levels of schooling. The policy envisions a future where technology enhances both teaching and learning, promoting equitable access to quality education. In this light, the role of school librarians becomes even more pivotal (Shivarama & Gujral, 2022) just society leading to national development. Universal access to quality education is the goal and aids the leadership and economic growth of our country on a global level. Developing and maximizing the potential of our country can be achieved through universal high-quality education. The Sustainable Development Goals (SDG 4). They are tasked with not only managing digital resources but also fostering an environment where digital literacy is a core competency. One of the crucial recommendations is to transform the school library into community library so that beyond the school hours the services of library may be provided. This study seeks to delve into the current state of ICT integration in school libraries, examining how it influences the digital literacy of school librarians and reshapes their roles in alignment with the goals of NEP 2020. By focusing on these aspects, the research aims to provide a comprehensive understanding of the challenges and opportunities that ICT presents in the realm of school libraries. The NEP 2020 emphasizes the need for librarians to adapt to new technologies and methodologies to support educational goals (Gautam & Parashar, 2021). Through structured surveys, this study will uncover the realities of ICT usage, the preparedness of librarians, and the broader implications for educational practices in the digital age.

Integration of ICT in Education and Research

Information and Communication Technology (ICT) has significantly transformed educational landscapes globally, marking a paradigm shift in teaching and learning practices. The integration of ICT in education has revolutionized how information is accessed, processed, and shared, making learning more interactive, engaging, and accessible. ICT facilitates a variety of learning experiences, catering to diverse learning styles and paces. Interactive tools such as educational software, e-books, and multimedia resources enhance student engagement and motivation. These technologies support collaborative learning through platforms that allow students to work together virtually, breaking geographical barriers and fostering a global learning community (Ghavifekr & Rosdy, 2015). Communication, and Technology (ICT). ICT

has democratized access to information. Online resources and digital libraries provide students and educators with a vast array of information that was previously inaccessible. This access to diverse knowledge resources helps bridge the educational divide, offering equitable learning opportunities to students regardless of their location or socioeconomic status. According to (Kozma, 2005) ICT can improve educational outcomes by providing students with learning opportunities that are not confined to traditional classroom settings. School libraries play an important role in providing access to supplementary materials that complement and enhance learning, encouraging critical literacy skills and independent research among students. Unfortunately, UNESCO/ADEA survey revealed that school libraries often have the lowest priority in educational spending and are inadequately staffed. Libraries also provide a enormous reading materials of different domains "for free of charge to parents who cannot afford to constantly buy new material, reaching out to them through community organizations and initiatives". (Krolak, 2005).

Evolving role of School Librarian in context of NEP 2020

The National Education Policy (NEP) 2020 of India sets a visionary framework for transforming the educational landscape through the integration of technology. NEP 2020 emphasizes the development of robust digital infrastructure in schools to facilitate the seamless integration of ICT in education. This includes ensuring access to the internet, digital library, Community library, digital devices, and online learning platforms (*National Education Policy, 2020*). The policy aims to equip students and educators with essential digital literacy skills, enabling them to effectively use technology for learning and teaching. Digital literacy is seen as a critical component of 21st-century skills, essential for personal and professional development in the modern world. NEP 2020 encourages the adoption of innovative pedagogical approaches that leverage technology to enhance learning outcomes. This includes the use of artificial intelligence, virtual reality, and other advanced technologies to create immersive learning experiences., the policy highlights the need for continuous professional development for teachers, focusing on building their capacity to integrate technology into their teaching practices effectively. By emphasizing these goals, NEP 2020 envisions a future where education is more inclusive, equitable, and aligned with the demands of the digital age (Khan, 2020). The policy's vision for transforming education through digital means underscores the importance of preparing students and educators to thrive in an increasingly digital world. The evolving roles of school libraries reflect broader changes in education and society, emphasizing the importance of adaptable, inclusive,

and technology-rich learning environments. Some of the advanced roles of the librarian is listed below:

Information Literacy Specialists: One key role taken up by the school librarian is that of the information literacy specialist, where he guides students and teachers to find information effectively, evaluate it, and use it. They teach the key skills of information literacy required in this digital age (Elkins, Wood, & Mardis, 2015)

Collaborative Teaching Partners: The librarians also work in collaboration with teachers to bond information literacy into the curriculum apart from teaching and supporting the process of inquiry-based learning. This creates classroom teaching collaboration and support, hence improving the general effect of teaching and learning.

Technology Integration Leaders: The school librarian is obligated to take the lead in implementing advanced technologies like artificial intelligence, digital resources, and ICT tools in a school setup. They facilitate the use of these technologies to improve library services and offer support for the educational process.

Digital Resource Managers: They are in charge of the digital collection and make availability of e-books, online databases, and other digital resources. The role involves such processes as upkeep and curation so that the content best serves the educational requirements of students and teachers

Support for Struggling Readers: Recognition of the struggling reader by the librarian and provision of age and skill appropriate material. They help individually to develop skills to read and foster a love in reading as pointed out by Merga in 2019.

Community Access: School librarians serve as a bridge between the school and the wider community. They provide ICT resources and support, particularly in under-resourced areas, helping to reduce the digital divide and enhance community digital literacy (Purwandari, Awaliya, & Anisah, 2020).

Digital Literacy Leadership: Librarians act as leaders in digital literacy, providing training to students, as well as teachers, regarding the proper use of information and digital resources. They provide training about/workshops on digital citizenship and the safety of online practices.

Pastoral Care Providers: In addition to the informational role, the school librarian can play an educational role but also contribute to students' social and emotional well-being. A librarian creates a safe environment within the library, helps on an individual level, and builds up a sense of community.

Professional Development Facilitators: This means that librarians organize for professional development workshops for teachers that will enlighten them on how to integrate library resources into their teaching and update their knowledge on new educational technologies and approaches as Yang & Chen, 2021 put it.

Objectives of the Study

The primary purpose of this study is to examine the integration of ICT in school libraries and its implications for digital literacy and the evolving role of school librarians in the context of NEP 2020. Specifically, the study aims to:

1. Assess the current state of ICT Integration and transformation in school libraries.
2. Evaluate the digital literacy skills of school librarians.
3. Examine how the school librarians play evolving roles in today's context.
4. Identify challenges and barriers to ICT Integration in library services.
5. Provide solutions and recommendations for enhancing ICT Integration and Digital Literacy.

Literature Review

The integration of Information and Communication Technology (ICT) in school libraries is pivotal in enhancing digital literacy and redefining the role of librarians, especially within the framework of India's National Education Policy (NEP) 2020. Recent studies underscore the importance of ICT in transforming educational trends and the critical role libraries play in this context. (Kumar & Kumari, 2023) highlight how ICT facilities provide students with digital tools and resources, significantly enhancing their educational experience. (Martzoukou & Elliott, 2016) emphasize the need for public librarians to engage communities in digital literacy initiatives. The role of librarians is evolving from traditional custodians of books to digital facilitators and educators. (Pierre – Robertson, 2023) this paper explores the evolving role of librarians in the constantly developing technological environment and demonstrates how librarians can combine information resources, technology and research assistance in these constantly changing spaces. It also explores how technology enhances the role of the librarian, with specific reference to ChatGPT. Findings The author stressed the need for library courses for credit to allow for feedback, assessment and critical thinking. The need for continuing professional development for librarians was highlighted. Additionally, areas such as Scholarly Publishing, Metrics and Analytics, Academic Integrity and Intellectual Property were identified as areas of focus for the 21st century Librarian. Research limitations/implications This study is limited to changes in roles as a result of emerging technologies which impact librarians. It is set in the Caribbean. Practical

implications This paper is relevant for librarians, regardless of their geographical location, who are also required to be fluid, keep on the cutting edge, adapt and adopt to deliver service in the face of constantly advancing technology. Originality/value This paper is a reflection on an original experience from a Caribbean territory. it also explores recent developments in technology, more specifically ChatGPT, and its impact on the roles of librarians. It provides contributions to the ongoing discourse on the evolving role of the librarian from a different perspective.””container-title”:”Digital Library Perspectives””DOI”:”10.1108/DLP-04-2023-0026””ISSN”:”2059-5816””issue”:”4””note”:”publisher: Emerald Publishing Limited””page”:”620-627””source”:”Emerald Insight””title”:”#SuperLibrarian – the evolving role of librarians in technology spaces””volume”:”39””author”:”{”family”:”Pierre – Robertson””given”:”Petronetta”}””issued”:”{”date-parts”:”[[”2023”,1,1]]}”}””schema”:”https://github.com/citation-style-language/schema/raw/master/csl-citation.json”} discusses the evolving roles of librarians in technology spaces, emphasizing the need for librarians to market and advocate for library services in the digital age

The NEP 2020 advocates for the development of school libraries to promote literacy and language development, underscoring the necessity for libraries to be equipped with digital resources and for librarians to be trained in ICT. Soni (2023) highlights the pivotal role of libraries in achieving the goals set by NEP 2020, emphasizing the need for libraries to support multilingual and diverse learning materials (Soni, 2023) which is a policy document released by the Government of India in July 2020. The NEP 2020 aims to transform the education system in India by focusing on holistic and multidisciplinary education, promoting research and innovation, and incorporating technology into the learning process. In terms of libraries, the NEP 2020 recognizes the crucial role that libraries play in promoting a culture of reading and lifelong learning. The policy emphasizes the need to strengthen school and public libraries by providing them with adequate resources, including books, digital resources, and trained librarians. Furthermore, the NEP 2020 recognizes the need to incorporate technology into library services, such as providing access to e-books, e-journals, and other digital resources. The policy also highlights the importance of promoting local and indigenous knowledge through the development of community libraries. Overall, the NEP 2020 envisions libraries as vital institutions that can contribute to the promotion of a knowledge-based society in India.””container-title”:”Journal of Learning and Educational Policy””DOI”:”10.55529/jlep.34.13.23””journalAbbreviation”:”Journal of Learning and Educational Policy””page”:”13-23””source”:”ResearchGate””title”:”A Literature Survey on National Education Policy 2020 (NEP 2020). The integration of ICT in school libraries is essential for fostering digital literacy and redefining the

role of librarians. Despite these advancements, integrating ICT in education and libraries presents challenges, including restricted access, security issues, and the necessity for continuous professional development of library staff (Das, 2020).

The evolving role of librarians in the context of India’s National Education Policy (NEP) 2020 further underscores the importance of integrating technology in education. Librarians are now seen as leaders in digital literacy, curators of digital content, and educators who support both students and teachers in navigating the digital landscape. Thapa (2022) also stresses the importance of libraries in fostering educational reforms and enhancing student engagement (Thapa, 2022) with an objective to prepare them for the changing knowledge landscape. In order to achieve this goal it has proposed major reforms and laid down guiding principles to redesign our education system. This study is an attempt to define the role of libraries in achieving the goals of NEP 2020. Even though, NEP 2020 does not explicitly define the role of library in the new education system, libraries can play an important role in facilitating e-learning, experiential learning, lifelong learning, community engagement and quality research. Libraries have always been an integral part of an education system and will continue to play an important role in the educational, social, political and cultural development of the society. In fact implementation of NEP 2020 will further enhance the role of libraries. But, there is a need to recognize the potential of libraries in meeting the objectives of NEP 2020. Concrete steps should be taken to transform the libraries into technology enabled smart libraries. Librarians also need to acquire the required skill set and adapt themselves to the changing environment. They will have to proactively work to develop rich collection of print and e-resources, provide fast and efficient information services and collaborate with teachers and administration to improve the teaching-learning experience. Policies should be drafted at national and local level to define the role and functions of the library in the new education system.””language”:”en””source”:”Zotero””title”:”NEP 2020: Pivotal Role of Libraries in Achieving the Goals””author”:”{”family”:”Thapa””given”:”Neelam”}””issued”:”{”date-parts”:”[[”2022”]]}”}””schema”:”https://github.com/citation-style-language/schema/raw/master/csl-citation.json”}. They play a vital role in implementing the NEP 2020 by providing access to diverse educational resources, promoting lifelong learning, and supporting overall educational goals. This shift highlights the need for librarians to adapt to new responsibilities and leverage ICT to enhance educational outcomes. Studies have shown that academic libraries significantly support the NEP 2020 by providing quality resources and promoting lifelong learning (Acharya & Vagdal, 2023)). Further research into the long-term impacts of these changes and the identification of best practices for ICT implementation in school libraries will be essential to maximize their potential benefits.

Various research available on the integration of Information and Communication Technology (ICT) in school libraries and education systems worldwide , Saka (2023) explores strategies for revitalizing the school library system in Nigeria, emphasizing the need for ICT adoption to enhance library services (Saka, 2023). Similarly, Adekoya and Inyang (2023) discuss the critical role of academic library leadership in Nigeria and the adoption of ICT to improve library operations and services (Adekoya & Inyang, 2023). Aslam (2022) examines the utilization of libraries, ICTs, and human resources at the secondary school level in the Shughnan district, highlighting the importance of these elements in educational development. Further he found that principals had close collaboration with the teachers who supported them to continuously keep on their teaching as proper as possible. (Aslam, 2022). FitzGerald (2022) provides insights into the potential of school libraries in the modern era, focusing on how they can be transformed through ICT (FitzGerald, 2022). Gunasekera and Balasubramani (2020a, 2020b) analyze the use of ICT by school teachers in Sri Lanka for information seeking and provision, underscoring the significant impact of ICT on teaching practices (Gunasekera & Balasubramani, 2020a, 2020b).). Mojapelo and Durodolu (2022) draw lessons from Limpopo province in South Africa regarding ICT in library facilities in disadvantaged rural schools, offering valuable insights for similar contexts (Mojapelo & Durodolu, 2022a, 2022b). The influence of ICT integration on the performance of digital literacy projects in public primary schools in Nakuru County, Kenya, is also highlighted by Salim and Onjure (2020). Through these studies we can explore that the ICT integration in the school libraries are going on from the most developed nations of the globe to the under developed nations.

Methodology

This study uses a quantitative research approach, specifically structured surveys, to explore how ICT is being integrated into school libraries, how digitally literate school librarians are, and how their roles are evolving under NEP 2020. We developed a detailed survey with close-ended questions based on a thorough review of existing literature and the study’s key objectives. Our target group included school librarians, from various schools, including public and private institutions in both urban and rural areas across India. To ensure our sample was representative, we used a stratified random sampling method, aiming for a final group of 100 respondents. The surveys were conducted online, making it easy for participants to access and complete them. We kept the survey open for a set period, sending reminders to encourage participation.

Data Analysis and Interpretation

The survey-based study done through the digital questionnaire which was floated among the various school librarians in which 99 responses has been received. Amongst received responses(fig.1.0), 66 librarians working in various private school viz. 67% of received responses and 33 librarians are working in Public (Government sector) Schools viz. 33% of received responses situated across various geographical locations of the nations. The 81.82% respondents belong to urban location and 18.18% belongs to the rural areas of country. The data has been collected from schools’ librarians of the schools which are affiliated to Central Board of Secondary Education (CBSE), Council for the Indian School Certificate Examinations (ICSE), The International Baccalaureate (IB) and State Boards. The respondents (fig.2.0) 90.90% respondents belong to CBSE whereas 03.03% respondents belong to each IB, ICSE and State Boards. Further, it may be noted that the CBSE holds a major stack in education sector as compare to ICSE and IB, CBSE made it mandatory to recruit the librarians in schools to provide better library services however in various state boards the post of librarians is vacant or not sanctioned.

Board	No. of Respondents
CBSE	90
ICSE	3
IB	3
State Board	3



Fig.1.0

Technologies and Librarians' Prospective

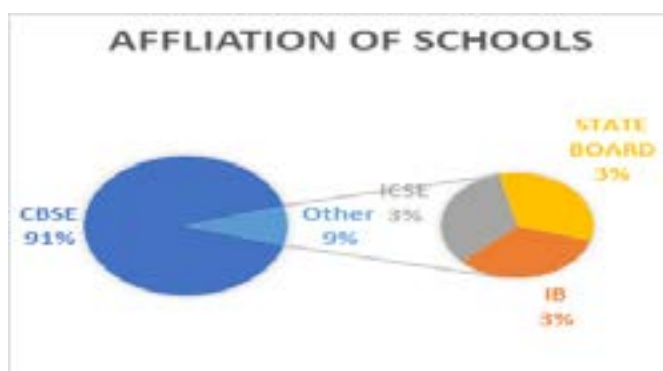


Fig.2.0

The study strives, encompassing the experiences of school librarians who are fresh out of the gate and joined the profession to those seasoned veterans with decades of knowledge and experience under their belts. *Figure 3.0* reflects that 17.06% of the respondents are having the experience of 0-5 Years and in the early stages of their professional life, 26.50% of the respondents are having experience of 5-10 Years, 14.07% of the respondents are having experience of 10-15 Years, 14.07% of the respondents are having experience of 15-20 Years, 26.50% of the respondents are having experience of more than 20 Years.



Fig. 3.0

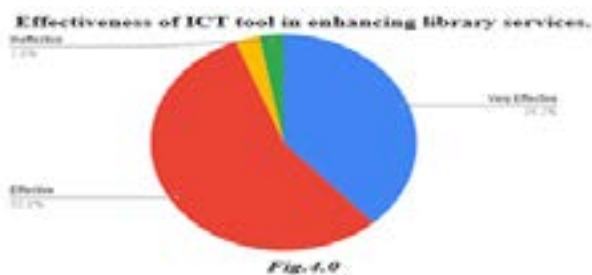


Fig.4.0

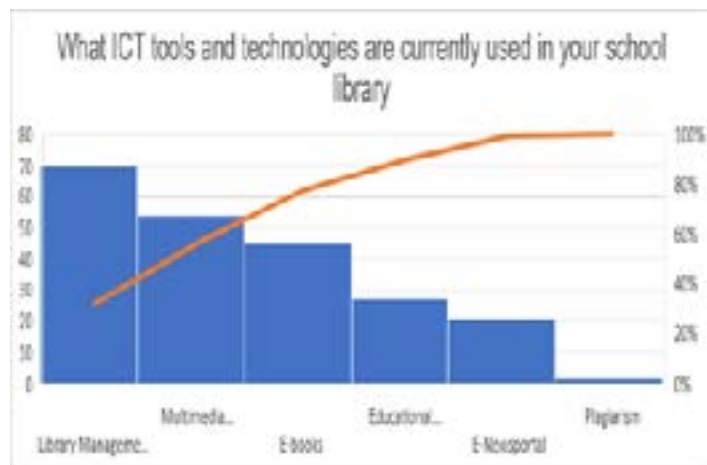


Fig. 5.0

Librarians are raving about the impact of information communication technologies (ICT) on their ability to serve users. The data shows (*Fig.4.0*) a whopping 94.10% of librarians find ICT 'Very Effective' or 'Effective' in enhancing library services. This suggests School librarians are experiencing a positive shift in their ability to connect with users, streamline workflows, and potentially reach a wider audience through the power of ICT. It's clear that many School librarians are enthusiastic about these technologies and the positive changes they bring to the

library experience. Only 2.90% of librarians found that it is ineffective.

In examining the ICT tools and technologies utilized in our school libraries (*Fig.5.0*), we find a varied landscape reflecting our commitment to enhancing educational resources. The Library Management System (LMS) emerges as a cornerstone, adopted by 70% of respondents, underscoring its pivotal role in optimizing library operations and user access. Multimedia resources are widely embraced, with 54% of respondents indicating their integration, showcasing our dedication to offering diverse learning materials tailored to student needs. The plagiarism detection tool shows lower adoption at only 2%, suggesting an area where increased emphasis on academic integrity monitoring could benefit our community as these may be used to curb the plagiarism specifically in Senior Secondary grades as currently this is being used only in IB affiliated School Library. E-books, educational databases, and e-newsportals exhibit moderate adoption rates of 45%, 27%, and 21% respectively, demonstrating a balanced approach in leveraging digital resources alongside traditional library offerings. These insights not only highlight our proactive stance in integrating technology into education but also illuminate potential avenues for further enhancing library services to better support teaching and learning objectives in line with National Education Policy.

Usage of Information Communication

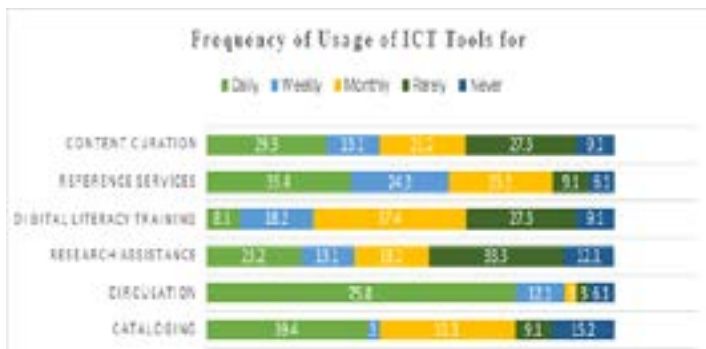


Fig. 6.0

The chart (fig.6.0) provides a detailed look at the various tasks performed by school librarians and how frequently they engage in these activities. Content curation is a daily task for about 29.3% of librarians, but a significant portion, 27.3%, rarely partake in this activity, indicating variability in the focus on curating digital content. Reference services are more consistently provided, with 35.4% of librarians offering these services daily and another 25.3% on a monthly basis. This shows a stronger emphasis on helping students and teachers find the information they need. Interestingly, digital literacy training is less frequently conducted on a daily basis, with only 8.1% of librarians engaged in it regularly. However, 37.4% conduct such training monthly, suggesting a periodic but crucial effort to enhance digital skills among students and staff. Research assistance follows a similar pattern, with 23.2% providing it daily and 33.3% rarely, highlighting a moderate level of support for research activities. Circulation duties, involving the lending and returning of books, are the most frequent daily task, with 75.8% of librarians engaged in these activities, underscoring their fundamental role in library operations. Cataloging, the process of organizing library resources, is performed daily by 39.4% of librarians, with another 33.3% doing it monthly. These insights reveal a blend of traditional and emerging responsibilities for school librarians. While core tasks like circulation and cataloging remain central, there is a clear need for more consistent engagement in digital literacy training and research assistance. This highlights the evolving role of librarians in supporting not just traditional literacy but also digital and informational literacy, crucial for the 21st-century learning environment.

Digital Literacy Skills

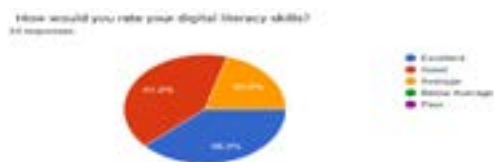


Fig.7 Digital Literacy Skills

Count of Have you received any formal training in digital literacy?

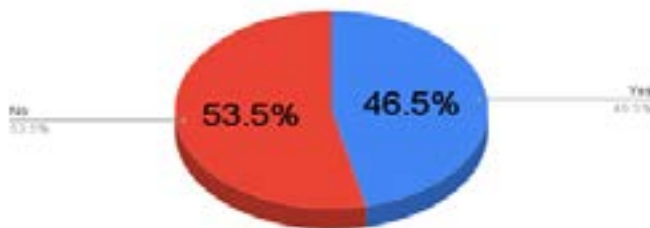


Fig.8 Formal Training Status

The responses (Fig.7&8) reveals a range of digital literacy skills among school librarians, with 38.2% rating their skills as “Excellent,” 41.2% as “Good,” and 20.6% as “Average.” Additionally, 46.5% of librarians reported having received formal training in digital literacy, while 53.5% had not. This indicates that while many librarians are confident in their digital abilities, more than half of them have not had formal training, and a significant portion still considers their skills to be average. These findings underscore the need for targeted professional development to enhance digital literacy across the board, enabling librarians to effectively utilize ICT tools, provide digital literacy education to students, and support the integration of technology in educational settings. This highlights the need for more focused professional development to help these librarians boost their digital skills so that they may fulfill the objective of National Education Policy (NEP-2020) to promote digital library and literacy. Enhancing these skills is crucial for librarians to effectively use ICT tools, teach digital literacy to students, and support the integration of technology in schools.

Changing Role of Librarian

This study investigated the impact of Information and Communication Technologies (ICT) on the role of librarians. The findings reveal a significant transformation (Fig. 9.0). A substantial portion of respondents (26.3%) reported dedicating more time to managing digital resources, while another significant portion (25.3%) indicated increased involvement in teaching digital literacy skills. Notably, the most impactful change lies in the dramatic rise in collaboration with teachers and students (42.4%). This statistically significant increase suggests an evolving role for librarians as partners in curriculum development and facilitators of digital literacy.

A strong majority of respondents 90.9%, comprised of 36.4% “Strongly Agree” and 54.5% “Agree (Fig.10) believe that ICT has significantly increased the impact of their role. This positive perception aligns with the observed changes in librarianship, suggesting that the shift towards digital resource management, digital literacy instruction, and collaboration is not just happening, but is also perceived by

librarians as a positive and impactful development. Notably, only a minimal percentage (6.1%) reported no significant change in their role, further strengthening the argument that ICT has demonstrably reshaped librarianship.

of respondents, emphasize the importance of having clear policies and guidelines to ensure the safe and responsible use of ICT. Interestingly, 15.2% of participants reported facing none of these issues, suggesting that while some libraries are well-equipped and supported, a substantial number still encounter multiple obstacles in effectively integrating ICT.

How has the integration of ICT changed your role as a librarian?

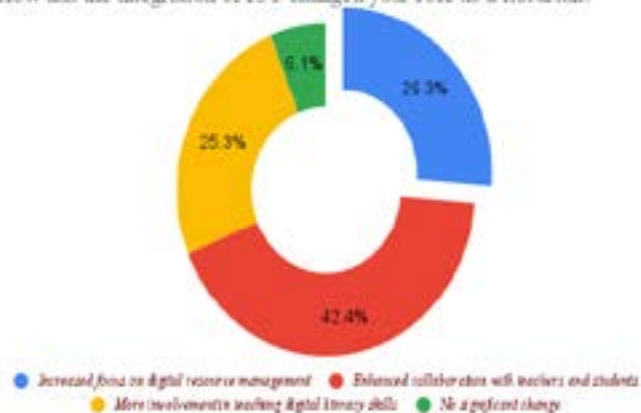


Fig. 9.0

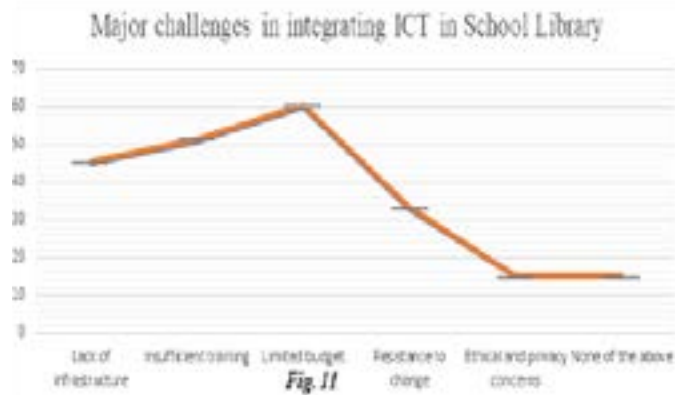


Fig. 11

Do you believe that ICT has made your role more impactful?

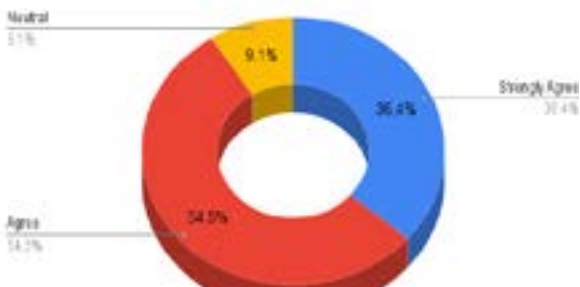


Fig. 10

Issues and Challenges in implementing ICT

Integrating ICT in school libraries presents several significant challenges. Our survey (Fig.11) reveals that the most prominent issue is a limited budget, affecting 60.6% of respondents. This financial constraint makes it difficult for schools to acquire and maintain the necessary technology.

Insufficient training, cited by 51.5% of participants, highlights the need for ongoing professional development to ensure librarians can effectively utilize new digital tools. Additionally, 45.5% of respondents pointed to a lack of infrastructure, indicating that many schools lack the essential hardware and software to support ICT integration. Resistance to change, observed in 33.3% of cases, reflects the difficulty in shifting established practices and mindsets among staff. Ethical and privacy concerns, noted by 15.2%

Recommendations for Enhancing ICT Integration in School Libraries

1.1 American Association of School Librarians (AASL): In 2023, the AASL emphasized the critical role of digital tools in modern education. They suggest incorporating various digital platforms like Adobe Express for creative projects and Discovery Education for K-12 learning to foster engagement and innovation in school libraries. Aligning these tools with the National School Library Standards ensures they support both students and educators effectively (AASL, 2023)

- 1.1. International Federation of Library Associations and Institutions (IFLA):** The IFLA's updated School Library Manifesto stresses the need for qualified professional staff and effective resource sharing through networks. It also highlights the importance of clear policies and training programs to address ethical and privacy concerns in the digital age, ensuring that school libraries can protect students while fostering a rich digital learning environment (IFLA, 2023b).
- 1.2. United Nations Educational, Scientific and Cultural Organization (UNESCO):** UNESCO champions the integration of ICT in education to bridge the digital divide and promote inclusivity. They recommend investing in digital infrastructure, offering continuous professional development for librarians, and developing robust data privacy policies. Additionally, UNESCO highlights the role of community libraries in providing digital resources

and lifelong learning opportunities, especially in underserved areas (IFLA, 2023a).

are well abreast of known knowledge and skills in these areas.

Recommendations and Suggestion

We have found the school librarians are very frequently using the ICT tools and other allied technology to do their tasks such as Circulation, Cataloguing, Content Curation, Reference Services, Research Queries, Plagiarism Check etc. Further we have noticed that more than 50% of school librarians have not received any formal training hence it is recommended that organization of formal training or a short term course will increase the efficiency and will promote the adult education and increase the level of confidence and efficiency towards their. As during the study we have also noticed that the transforming role of librarian in their self assessment is being more impactful which also generate the need of proper training to implement National Education Policy 2020 more effectively. Some of the key suggestions are listed below:

- 1.3. Formal Training and Short-Term Courses:** Organizing formal training programs and short-term courses to suit the needs of librarians that will drastically improve their efficiency, inculcate a habit of continued education of adults, and enhance their confidence while using digital resources.
- 1.4. Workshops:** From the findings of the survey, it can be noticed that nearly 50% of the school librarians are of the opinion that workshops are the best mode of learning as far as improving digital literacy is concerned. Workshops will provide hands-on experience and learning from fellow participants.
- 1.5. Mentorship Programs and Online Courses:** Mentorship programs, with support from 30.3% of the respondents, would provide an avenue for personalized guidance and support. Online courses, favored by 20.2%, need to be developed in order to provide flexible learning that librarians can acquire at their convenience.
- 1.6. Curriculum Review:** Library and Information Science schools are encouraged to redesign their curriculum to accommodate features on digital literacy, ICT tools, and applications of AI, which are fast developing. Short-term courses, leaning on those areas aligned with the practice of librarianship, should be developed to ensure practitioners

- 1.7. Infrastructure Investment:** Increase investments in the infrastructure so that library services can be offered uninterrupted through enhanced budget allocations and through strategic policy formulation for supporting development of digital libraries and ICT resources.

- 1.8. Use of emerging technologies:** Integrate AI technologies, such as generative AI and image recognition, within library operations. They can explicitly assist in many tasks, provide invaluable demonstrations about ways to be more ethical in their use, and boost the general efficiency of the library.

- 1.9. Community Libraries as ICT Hubs:** In that respect, a school community library can be used to provide additional ICT resources and support. Through this resource and support, libraries may bridge related gaps in access and training in those under-resourced areas and increase the level of digital literacy of the students and the community at large, thus diminishing a digital divide.

Conclusion

Integrating Information and Communication Technology (ICT) into school libraries has become essential for enhancing educational outcomes, especially in line with the National Education Policy (NEP) 2020. Our study highlights the varied landscape of ICT adoption and digital literacy among school librarians. While many librarians show strong digital skills and actively use ICT tools like library management systems and multimedia resources, there are noticeable gaps in formal training and advanced digital competencies. School librarians' roles are rapidly evolving due to ICT, turning them into digital mentors and key players in digital literacy. However, challenges such as uneven distribution of ICT resources, especially between urban and rural schools, and concerns about ethics and privacy, present significant hurdles. Additionally, there is a clear need for ongoing professional development to fully leverage the potential of ICT in education. Importantly, the study also underscores the potential for community libraries to play a crucial role in bridging the digital divide, providing additional resources and support to both students and school librarians.

References:

AASL. (2023, May 18). AASL announces 2023 best digital tools for

- teaching & learning | ALA. *The American Association of School Librarians* (AASL). <https://www.ala.org/news/2023/05/aasl-announces-2023-best-digital-tools-teaching-learning>
- American Library Association. (2023). Digital literacy. Retrieved from <https://www.ala.org/pla/initiatives/digitalliteracy>
- Acharya, S., & Vagdal, T. (2023). The role of academic libraries in the context of national education policy (NEP)-2020. *IP Indian Journal of Library Science and Information Technology*, 8, 32–36. <https://doi.org/10.18231/j.ijlsit.2023.006>
- Adekoya, C. O., & Inyang, E. O. (2023). Academic library leadership in Nigeria and ICT adoption. *International Information & Library Review*, 55(3), 220–232. <https://doi.org/10.1080/10572317.2022.2119352>
- Aslam, A. M. (2022). The utilization of libraries, ICTs and human resources at the secondary schools level in Shughnan district [PhD Thesis, Brac University]. <http://dspace.bracu.ac.bd/xmlui/handle/10361/16534>
- Das, P. (2020). Challenges in integrating ICT in libraries and education. *Journal of Digital Information Management*, 18(2), 102–110.
- FitzGerald, L. (2022). What a school library can be in 2022. *Access*, 36(1), 9–14.
- Gautam, P. J. N., & Parashar, R. (2021). New education policy 2020: Role of the librarian in the library. *Academic Discourse*, 10(2), 1–7.
- Gunasekera, C., & Balasubramani, R. (2020). Use of information communication technology by school teachers in information provision: An analysis of Sri Lankan perspective. *Library Philosophy & Practice*. <https://core.ac.uk/download/pdf/345180522.pdf>
- Ghavifekr, S., & Rosdy, W. A. W. (2015). Teaching and learning with technology: Effectiveness of ICT integration in schools. *Indonesian Journal of Educational Research and Technology*. <https://www.semanticscholar.org/paper/Teaching-and-Learning-with-Technology%3A-of-ICT-in-Ghavifekr-Rosdy/cd2b-cafd57465839678f7968fd79c6feb4c5badf>
- IFLA. (2023a, January 27). The internet in 2023: Key issues for libraries. *IFLA*. <https://www.ifla.org/news/the-internet-in-2023-key-issues-for-libraries/>
- IFLA. (2023b, April 20). School libraries section. *IFLA WLIC 2023*. <https://2023.ifla.org/cfp-calls/school-libraries-section/>
- Kumar, S. (2018). Impact of ICT on education and libraries. *Journal of Library and Information Technology*, 35(4), 12–20.
- Kumar, U., & Kumari, S. (2022). Library system for transforming educational trends in a special context to the adoption of information & communication technology (ICT) literacy.
- Khan, D. B. (2020). Key role of libraries highlighted in the context of national education policy 2020. *IOSR Journal of Humanities and Social Science*, 28(10), 28–31.
- Kozma, R. B. (2005). National policies that connect ICT-based education reform to economic and social development. *Human Technology: An Interdisciplinary Journal on Humans in ICT Environments*, 1(2), 117–156.
- Krolak, L. (2005). The role of libraries in the creation of literate environments. *Education for All Global Monitoring Report 2006 Literacy for Life*. UNESCO Institute for Education (UIE).
- Lo, P., & Chiu, D. (2015). Enhanced and changing roles of school librarians under the digital age. *New Library World*, 116, 696–710. <https://doi.org/10.1108/NLW-05-2015-0037>
- Martzoukou, K., & Elliott, J. (2016). The development of digital literacy and inclusion skills of public librarians. *Communications in Information Literacy*, 10(1). <https://doi.org/10.15760/comminfolit.2016.10.1.17>
- Maharani, A. (2023). The integration of information and communication technology (ICT) in English textbook (A content analysis of grade XI of senior high school textbook “English for Change”) [B.S. thesis, FITK UIN Syarif Hidayatullah Jakarta]. <https://repository.uinjkt.ac.id/dspace/handle/123456789/72479>
- Mojapelo, S. M., & Durodolu, O. O. (2022a). Information and communications technologies in library facilities in disadvantaged rural schools in South Africa: Lessons from Limpopo province. *Education for Information*, 38(2), 113–131.
- Merga, M. (2019). How do librarians in schools support struggling readers?. *English in Education*, 53, 145–160. <https://doi.org/10.1080/04250494.2018.1558030>
- National Education Policy, 2020. (2020). *Ministry of Human Resource Development, Government of India*.
- Purwandari, S., Awaliya, E., & A. (2020). Library management in the implementation of school literacy movement in primary schools. *Proceedings of the 1st Borobudur International Symposium on Humanities, Economics and Social Sciences (BIS-HESS 2019)*. <https://doi.org/10.2991/assehr.k.200529.190>
- Pierre – Robertson, P. (2023). #SuperLibrarian – the evolving role of librarians in technology spaces. *Digital Library Perspectives*, 39(4), 620–627. <https://doi.org/10.1108/DLP-04-2023-0026>
- Saka, K. A. (2023). Revitalizing the school library system in Nigeria: The way forward. <http://repository.futminna.edu.ng:8080/jspui/handle/123456789/18192>
- Salim, C. I., & Onjure, C. O. (2020). Influence of ICT integration on performance of digital literacy project in the public primary schools in Nakuru County, Kenya. *The International Journal of Business & Management*.
- Shivarama, J., & Gujral, G. (2022). Imbibing and implementation of NEP2020 for re-imagining libraries

- for research and development. <https://ir.inflibnet.ac.in:8443/ir/handle/1944/2368>
- Softskill. (2020, March 31). Ideas to teach digital literacy skills – Softlink. *Softskill Education*. <https://www.softlinkint.com/blog/great-digital-literacy-skills-ideas-for-your-school-library/>
- Softlink. (2023). Great digital literacy skills ideas for your school library. Retrieved from <https://www.softlinkint.com/blog/great-digital-literacy-skills-ideas-for-your-school-library/>
- Soni, M. (2023). A literature survey on national education policy 2020 (NEP 2020) and libraries. *Journal of Learning and Educational Policy*, 13–23. <https://doi.org/10.55529/jlep.34.13.23>
- Thapa, N. (2022). NEP 2020: Pivotal role of libraries in achieving the goals.
- Yang, M., & Chen, K. (2021). Teaching support of Taipei senior high school libraries. <https://doi.org/10.29173/IASL7597>