



CERTIFICATE NO : **ICRESTMH /2024/C0824887**

Technical College Libraries: An Overview

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ABSTRACT

Technical college libraries are specialized academic libraries focusing on supporting technical training and vocational education with a narrow collection of resources like industry manuals, standards, and technical magazines, often supplemented by basic business resources. They act as knowledge centers, offering access to technical literature, standards, and journals through both print and digital formats. Unlike broader academic libraries, they have a less pronounced focus on deep research and extensive bibliographic instruction, instead prioritizing support for curriculum requirements and self-development in technical fields. In this article, technical college libraries: an overview has been discussed.

Keywords: *Technical, College, Libraries.*

INTRODUCTION

Technical college libraries focus on specific technical disciplines, such as engineering, providing comprehensive collections of technical literature to support their academic programs. Technical college libraries are specialized academic libraries designed to serve the information and research needs of students, faculty, and researchers in technical fields, acting as vital centers for knowledge and learning within their institutions. They house diverse technical literature, support curriculum requirements, and provide access to both physical and digital resources, including online databases and e-journals. These libraries are crucial for supporting technical education, fostering research and development, and producing skilled human resources for a nation's development by offering access to a wide array of technical information and user-centric services. Technical college libraries serve as centers for research and development, offering resources that aid both students in their project work and faculty in their scholarly pursuits. Modern technical libraries provide access to a wide range of resources, including traditional books, journals, and newspapers, alongside digital resources like e-journals, CD-ROM databases, and online platforms like NPTEL and DELNET. Libraries offer various services to meet the needs of their users, including interlibrary loan programs, computer access, and information retrieval to support academic and career development. Many technical college libraries join consortia to share resources, enabling access to a vast collection of e-journals and databases at a lower cost, enhancing the quality of technical education. (Tekale, R.B. & Dalve, D.B., 2017).



TECHNICAL COLLEGE LIBRARIES

The purpose of a technical college library is to support the academic and research needs of its students and teachers in the fields of science and technology. Their mission encompasses granting access to pertinent information resources, promoting information literacy, and enhancing the overall educational experience. They also seek to foster a constructive learning atmosphere and enhance the college's reputation through exemplary service. The main goals include making it easier to access a variety of resources like books, journals, online databases, and other materials related to the college's programs and courses; helping students and faculty learn how to find, evaluate, and use information for their studies and research; providing support for research activities, including access to scholarly articles, research data, and specialized software; incorporating library resources and services into the learning process, assisting faculty with their teaching, and offering workshops and training on information literacy; creating a friendly and accessible space for studying, researching, and working together, with the right facilities and technology; and encouraging students to independently find and use information, which is important for their ongoing learning and career growth. The technical college library functions as an essential centre for knowledge generation, diffusion, and application, significantly contributing to the academic and research achievements of the school. (Chand, S., 2020)

Technical college libraries are vital for facilitating the academic and research requirements of students and teachers. They offer access to an extensive array of resources, including books, journals, and digital databases, along with services such as research support and information literacy training. These libraries serve not only as repositories of materials but also as knowledge centers that promote learning, research, and the advancement of the academic community.

Libraries in higher technical education institutes have significantly evolved in conjunction with diverse organizations. These libraries are evolving into hubs of knowledge. The libraries inside these institutions are unique among special libraries, as they cater to the requirements of specialized users and exemplify the characteristics of an academic library by supporting and enhancing academic programs. Consequently, they fall under the classification of specialized academic libraries. This type of library is a vital resource for the academic community, aiding its members in self-development, meeting curriculum requirements, and fostering study and research.

The library of a higher technical education school serves as the primary conduit for delivering information to meet users' informational needs. The main jobs of a library in a technical education school include building a large collection of technical books, organizing and providing access to information using different tools, and helping users find the growing amount of technical knowledge through various information services. Libraries are a crucial part of higher technical education institutions and need to have enough space and furniture for users, trained staff to help users access the collections, a wide range of materials to satisfy different user needs, and the right technology to provide quick and efficient services, among other things. We conducted this study to evaluate the preparedness of libraries in higher technical education institutions to effectively cater to their users' needs.



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25TH AUGUST, 2024

The library's function is inherently contingent upon the educational goals of the institution. Often, these are implicit or insufficient. This document references definitions of aims for higher education and examines their implications for libraries. It is advocated that libraries, and hence librarians, ought to be regarded as essential and proactive components of the educational process, participating in course planning and growth. The function ascribed to libraries in conventional higher education has not been applied to the consideration of external study modalities. (Sharma, O. & Modak, A., 2019)

The study scrutinizes the extent to which technical college libraries utilize information technology to enhance their services, pinpoint adoption barriers, and assess the impact on user satisfaction and academic success. There is a lack of suitable infrastructure, insufficient training for librarians, financial constraints, and the need to adapt to diverse learning styles. The lack of appropriate infrastructure, insufficient training for librarians, financial constraints, and the need to cater to a variety of learning styles are all contributing factors. It is advisable to investigate the manner in which technical college students' access and utilize information, the function of library resources in their academic endeavors, and the efficacy of library services in addressing their research requirements. There is a lack of knowledge about easily accessible resources, inadequate guidance on utilizing digital technologies, and the need to bridge the digital gap among students and to evaluate the present state of information literacy among technical college students, assess the efficacy of library programs in enhancing information literacy abilities, and pinpoint areas for enhancement in library education and support. There is a necessity for focused information literacy training, the incorporation of information literacy into the curriculum, and collaboration between librarians and professors. Technical college libraries have the ability to incorporate new technology and digital resources into their operations while maintaining their core functions, and they must develop strategies to ensure their long-term sustainability and significance. The pertinent issues encompass budget constraints, evolving user expectations, and the necessity for librarians to develop new skills and knowledge. By concentrating on these domains, researchers can acquire a more profound comprehension of the issues and opportunities confronting technical college libraries and aid in formulating effective methods to enhance their role in facilitating student learning and research. (Rathna, P. & Divyananda, K., 2018)

A library at a technical or engineering college, or polytechnic, might be categorized as a special library. Like other academic libraries, technical libraries affiliated with engineering universities gather, organize, conserve, and transmit information and expertise. Engineering libraries offer services to diverse clientele, including undergraduate and graduate students, faculty members (both teaching and non-teaching), and researchers. Engineering libraries procure literature pertaining to engineering and related disciplines. These libraries function as knowledge repositories or information centers that provide both conventional printed materials and information services, in addition to ICT-based library resources and services. These libraries currently subscribe to the DELNET network and online databases like IEE, ASCE, Science Direct, ASME, Springer, and N LIST Resources (through INFLIBNET), as well as the NPTEL platform for video courses, to share resources. These libraries



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TECHNOLOGY, MANAGEMENT AND HUMANITIES (ICRESTMH – 2024)

25TH AUGUST, 2024

today possess proactive, dynamic, engaged, participatory, and interpretive attributes. They provide a dynamic environment for scholarly activities and serve as a hub for education. The majority of study commissions and review committees have emphasized the significance of libraries in higher education. Electronic resources are expanding concurrently with traditional materials in contemporary libraries, particularly in engineering college libraries, for numerous reasons. Contemporary libraries ought to prioritize information access over mere information availability. Libraries utilize many methods and procedures to facilitate straightforward access to information. (Chatterjee, S., 2020)

The measures encompass the organization of books, journals, magazines, and other materials on shelves; the quantity of copies available for each title; collections of print and electronic resources within the library; support and maintenance of the digital library; accessibility of electronic resources from the college or home (remote login); the design of the library's website; the user's capacity to locate information; and reproductions of materials (current awareness services). Information is displayed on notice boards and regularly updated, while the library's technology (computers, photocopiers, printers, information on new acquisitions, employment announcements, event posters, circulars, etc.) is maintained in optimal condition. Every successful engineering institution acknowledges the library's critical role, among others. Libraries diligently strive to educate their patrons and to foster academic endeavors and enduring reading practices. The resources of any engineering college library can be categorized into two primary formats: print and electronic. Numerous engineering college libraries currently acquire electronic materials alongside print formats owing to advancements in information and communication technologies. The libraries use electronic resources to meet the needs of their users. (Dalve, D.P. & Nawathe, M.S.S., 2017) Acquiring electronic resources such as eBooks, e-journals, e-databases, and audio-visual assets is essential. Numerous libraries establish a consortium to consolidate purchasing power and mitigate financial constraints. Engineering colleges equip their libraries with the latest IT infrastructure to distribute information from their electronic resources. (Trivedi, R., 2019)

Currently, there is no specific framework for libraries tailored to technical or engineering institutions; however, it is imperative to establish and delineate the foundational structure of engineering libraries. The foundational framework of engineering and technology libraries should incorporate several critical elements, as revealed by a comprehensive analysis of numerous published studies and materials. A college library ought to acquire a diverse array of educational and instructional resources to satisfy the multifaceted academic and extracurricular needs of students and faculty.

An astutely formulated acquisition policy must underpin the assessment of the collection's quality. The Library Advisory Committee frequently establishes this policy. Teams of experts, proficient in contemporary publications and possess extensive comprehension of the literature within their specific domains, facilitate the selection process. The librarian and staff should utilize global selection tools to attract specialists to diverse works and enhance a collection tailored to the requirements of education and instruction.



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25TH AUGUST, 2024

Libraries serve as hubs of information, activity, and technology, often characterized by their substantial size and intricate architecture. It is essential to understand modern principles of library design to provide suitable, secure, and comfortable environments for reading, learning, research, and social interaction. Today, libraries face immense expectations. Designers, architects, and engineers are working to create captivating exteriors and interiors that attract a diverse audience. Numerous projects prioritize participant engagement across various contexts, aiming for adaptability and a profound sense of location. Structural engineers and designers assert that the functional modern library in the realm of engineering and technology requires the incorporation of specific elements. (Burhansab, P.A., Batcha, M.S. & Ahmad, M., 2020)

The library is the central hub of every organization, academic institution, firm, or individual, and it is crucial for the efficient dissemination of knowledge across the user community. The library has expanded significantly to enhance its service to the user community due to the heightened utilization of ICT. The volume of textual content available in various electronic formats is quickly escalating to deliver essential digital services to users in the current digital age. Libraries utilize computers to enhance the efficacy and efficiency of their operations and services. They also provide librarians with management data to facilitate informed decision-making. The advancement and utilization of information and communication technology (ICT) enable libraries to furnish their clients with necessary information from their collections and access the catalogs of both local and distant libraries. The predominant academic libraries in India presently employ library automation, which initially emerged in select special libraries during the late 1970s. In the contemporary era, libraries and information centers bear an enhanced obligation to provide users with access to the most current information and to elevate the quality of education nationwide; however, this objective cannot be achieved without each institution possessing an efficient library and information system. Consequently, the computerization of library facility operations should be implemented as an integral component of the library education system's overarching agenda. (Raja, T. & Kennedy, I.R.K., 2019)

Information and Communication Technology (ICT) serve numerous functions within libraries. It assists libraries and information centers in constructing databases of their collections and facilitating user access, both internally and externally, using computer networks. Upon the creation of databases on a computer within an automated library, many services, such as bibliographic, indexing, current awareness, and selective dissemination of information, are automatically generated and made accessible to users. Networking enables libraries to exchange resources and services more efficiently, particularly in the context of escalating document costs and diminishing budgets.

The primary objective of ICT in libraries is to incorporate ICT tools and equipment into the information-providing process as a medium and technique. Information and communication technology in libraries primarily aims to educate clients about the functionality of computers and other electronic devices. Information and Communication Technology (ICT) has facilitated the swift and effortless acquisition of information sources such as books, journals, and newspapers. Most publishers maintain webpages available online, where one can review their catalogues for new



INTERNATIONAL CONFERENCE ON RESEARCHES IN ENGINEERING, SCIENCE,
TECHNOLOGY, MANAGEMENT AND HUMANITIES (ICRESTMH – 2024)

25TH AUGUST, 2024

library items. A librarian can efficiently place an online order and, if required, obtain answers to any inquiries by email. Several publishers also provide their periodicals online. Libraries cannot provide all information to their users due to escalating document costs and insufficient resources. However, this issue was rectified because of ICT libraries. The user can independently browse other libraries' OPACs or request a specific document from the librarian. Upon conducting a search, the individual may request that the library lend the material to another library.

The National Digital Library of India (NDLI) is a virtual library that offers search and browse capabilities, along with many services for the educational community. The Ministry of Education of the Government of India sponsors and oversees the National Mission on Education through Information and Communication Technology (NMEICT). Filtered and federated searching provide focused inquiries, enabling students to swiftly and effortlessly find relevant resources. NDLI provides services customized for specific user demographics, including exam preparation for secondary and tertiary students, as well as for job applicants. Additionally, the NDLI provides services for general learners and researchers. Designed to accommodate content in any language, the NDLI provides interface support for the ten most spoken languages in India. It is intended to serve students of varying academic levels, encompassing researchers and lifelong learners, all academic disciplines, all commonly utilized access devices, and students with disabilities. The objective is to enable individuals to prepare for scenarios by acquiring knowledge from global best practices and to facilitate researchers in doing integrated research from diverse sources. It was established and administered by the Indian Institute of Technology Kharagpur. (Patil, V. & Fernandes, J., 2017)

The primary benefit of utilizing a digital library for education is the availability of resources and access to an extensive array of instructional information. Selecting various learning formats offers students advantages, as the digital learning platform meticulously curates the options in accordance with the course. An engineering student can utilize a digital library to access instructional videos for learning. Unlike a traditional library, a digital library enables students to engage with real-time visuals, such as infographics or videos, facilitating a comprehensive understanding of the subject matter and to providing access to a diverse range of educational resources expands their learning opportunities. (Anuradha, P., 2018)

CONCLUSION

Technical college libraries are indispensable knowledge centers, but many must overcome challenges like a lack of resources and outdated technology to effectively support technical education, research, and student success. To be vital, they need financial support, modern infrastructure, diverse and accessible collections, skilled staff, and strategic adoption of digital technologies to meet the evolving needs of patrons and facilitate self-development and academic growth. These libraries serve as vital intellectual centers, complementing academic programs by providing access to information for students, faculty, and researchers. They are special academic libraries catering to the needs of users in technical and engineering fields, requiring comprehensive collections of technical literature. Libraries support the curriculum by organizing information and providing access to various tools and resources.



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