

Evaluating Information Literacy Skills and Library Resource Utilization among Teachers in Aided Colleges Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University

Mr. Surendra Digambar Awathare

Research Scholar,

Department of Library & Information Science R. T. M. Nagpur University Nagpur

Dr. Dhananjay W. Deote

Research Supervisor,

Bar. Sheshrao Wankhede College Mohpa, Dist. Nagpur.

Abstract:

In the present study, Magistrabate's teachers in the four districts (Nagpur, Wardha, Bhandara and Gondia) under Rashtrasant Tukadoji Maharaj Nagpur University of the aided colleges have been explored and analyzed for the utilization of the information literacy skills and information resources. The study has been made in order to assess the competency of teachers in various activities like identification, access, assessment and fruitful use of information resources available in college library as well as the electronic medium. Descriptive and empirical research design was used in the study. Primary data gathered by using structured questionnaire to generate from a sample of 100 teachers from each of the four districts comprising 400 teachers in the aided colleges. The scope of this research spans various components of information literacy, including information resource awareness, information search strategies, print information usage, electronic information usage, information source evaluation skills, competencies in accessing a digital information environment and library usage. The results will be used to inform regarding the state of information literacy with the teachers and the use of various forms of library resources by the teachers for professional development, research and teaching. The study also highlights the role of the current information literacy programmes, user orientation programmes, electronic library training programmes and improved information provision of electronic information sources. The results provide meaningful recommendations on developing information-literate teaching communities in college libraries, libraries and librarians and college administration or university leadership institutions to enhance information services.

Keywords: Information Literacy, Information Literacy Skills, Library Resource Utilization, Academic Libraries, Teachers, Aided Colleges, Digital Information Resources, Library Services, Higher Education, RTM Nagpur University, Nagpur, Wardha, Bhandara, Gondia.

Introduction

With the emergence of a knowledge-dependent and knowledge-oriented work, teacher's skills and capacity to find, retrieve, analyse, understand, and use information properly is now crucial. Digital technologies, electronic databases, electronic journals, institutional repositories, e-books, open education resources and Web-based information platforms have revolutionized the way academic libraries work and provide information. Teachers no longer have to be restricted to using printed books and traditional libraries; instead, they are expected to have traditional, as well as information literacy skills to employ in their teaching, research, curriculum development, career advance and lifelong learning.

An understanding of information literacy enables teachers to recognise information needs, the quantity and quality of information required, how to locate relevant and reliable information, the importance of assessing the quality and credibility of information, and the need and importance of information usage in an efficient and ethical way, understanding of the ethical and legal aspects of information usage. So, information literacy in HEIs is closely related to the effective use of HEI's library resources and the quality of academic activities. Academic libraries play the key role in providing the teachers with facilities regarding books—textbooks and reference books, journals, periodicals, newspapers, theses, dissertations, databases, e-resources, digital repositories etc.—with an easy access.

However, a degree of availability in libraries is not sufficient to ensure effective library resource usage. Having the proper knowledge, search skills, technology proficiency and critical assessment skills are essential for teachers to efficiently utilize these resources. In addition, the increasing information landscape has made these abilities essential talents for educators as they constantly find themselves in a sea of search engines, social media and websites, online publications and academic online platforms for information. The ability to locate reliable and correct sources of information from erroneous, misinforming, outdated or commercial information is consequently becoming an integral part of schoolwork. For teachers, the information skills taught may influence teaching and learning not only, but also influence on information literacy and information seeking behaviours of the students.

The role of Librarianship as an institutional support system in teaching and research is important but there are variations in library collection development, technological

infrastructure, access to e-resources, library automation, users orientation programme and professional support. These disparities may impact how teachers access library resources, and the extent to which teachers are information competent. Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU) has a fabric of its associated colleges in Vidarbha region having Nagpur, Wardha, Bhandara and Gondia districts. The teachers' comparative judgments provide more comprehensive information regarding information literacy skills and information use pattern of teachers from these districts. This is a vital assessment when it comes to “digital learning”, teaching based on study, academic research and technology-based higher education. Learning scenario: In this scenario the present study will cover the information literacy skills of teachers of assisted colleges attached to RTM Nagpur University and their use of Library resources.

The primary data has been collected by adopting structured questionnaire method from 100 teachers selected from each District (Nagpur, Wardha, Bhandara & Gondia) and total of 400 teachers have been selected for the study. This study attempts to reveal what teachers are aware of the various library resources, how they search and retrieve information, their preference for print and electronic information resources, how they evaluate information sources and how they use library resources in teaching and research and in professional development. The study sets out to delve into information literacy competence of teachers under these dimensions, highlighting the strengths, weaknesses and problems. The results can be useful for librarians to design effective information literacy programs, for college administrators to design user education programmes, and for policy makers and university authorities to design IT training programmes for digital libraries and to improve the services in libraries. Last but not least, an increase in the information literacy of academic librarians' teaching staff may result in an enhanced effective use of academic library resources, effective academic teaching and learning practices, and an academic library user community that has become more informed and technologically adept.

Literature Review

The changing information environment has had a profound impact on the information literacy needs of educators and library users as well as on academic libraries. This phase has been reinforced by this one (the COVID-19 pandemic) which saw higher education institutions and libraries having to embed a "traditional face to face" information delivery model in a largely digital or distance approach. In this regard, Ali and Gatiti (2020) studied the role of the Librarians and the Information Professionals of the era of Covid-19 and highlighted their

crucial role in spreading information and knowledge about health and academics with trust. They pointed out that the information professional became not just a person filling in users, but rather a person representing a large amount and variety of digital information sources, with the focus on information literacy and digital competences accentuating the importance.

Access Boa's 2020 case study on the experience of online teaching at Peking University, which highlights how the process of online teaching has been embraced by HEA quite quickly during Covid. The research highlighted the need for digital platforms, online materials and the skills related to digital technology in continuity of learning and also indirectly within the topic highlighted the importance of the information and digital technology skill of teachers. In parallel, Ashwin Abinandi, Mahmood and Malik 2022 analysed the changes in academic libraries in this era and pointed out the major changes and hurdles that come in the path of the digitization of the academic library services. Most of their findings indicate that academic libraries were making strides in meeting changing user information needs through the adoption of electronic resources, remote access, virtual reference, and through technology to facilitate communication. It suggests that the library users, particularly teachers and researchers of the present day should possess a proper information searching and participate in the information game with effective use of the library's resources.

In India, Mahesh and Mittal (2021) examined the response of academic libraries in the times of Covid-19, highlighting that during the pandemic, libraries used to give greater focus on providing digital services and electronic resources which helped students, academic staff and researchers who were not able to be present in the physical libraries. They demonstrate how digital library infrastructure as well as remote access services come to play an important role in the continuity of academic activities. Likewise, Kumar and Kumar (2021) have conducted a research on the COVID-19 Resilient attributes of the academic libraries in India and noted the conversion of the academic libraries into digital and information transfer system through alternate medium during the current situation. Thus the value of academic services could continue to be as much about the ability of all those people to be effective in learning about information through digital technologies as it is about the resources being available for them to use. In tandem with these has been a tremendous interest in the skills the Library offers.

The study by Kumar and Singh (2019) has explored the digital literacy skills and its relevance in the context of technological knowledge and digital competencies of library and information

science (LIS) professionals of India. Das and Dutta (2022) addressed digital literacy skills of librarians in higher education academics in the context of COVID-19 and found that librarians need constant professional growth with a need to acquire and develop a new set of skills as digital literacy to effectively manage and provide information services based on the technologies. The results of their study were still applicable to the current study, as librarians who had more digital skills were more likely to be able to help teachers over electronic databases, online journals, digital repositories, and other information resources in the scholarly universe.

Considering the COVID-19 pandemic has influenced academic libraries' digital competency across the globe among all types of personas, Luh, Shu and Chiang (2021) conducted research on academic libraries' LIS professionals' digital production capacity in Taiwan and stressed the importance of digital competency to cope with the users' increasing demands by technology swiftly, efficiently, and effectively. The conclusions and findings of the study echo the other studies also conducted around the world on the impact of digital transformation on the profession of information professionals and the relationship of consumers/users and academic libraries. The International Federation of Library Associations and Institutions (IFLA, 2020) provided a global overview of the effects of COVID-19 on the world of libraries, and discussed how libraries should adjust to the changing nature of services, adjust access to them to accommodate distances, and provide users with assistance through digital information channels. Overall, the papers reviewed show that there has been a definite progression towards user-centred information services in which technology/doors are a central element of information services in libraries.

However, most of the literature has been about the librarian, the digital value of Librarianship, the Library profession, the institutional measures, and the Covid-19 Digital transformation of Academic libraries, before and after. A number of studies have not been carried out on the information literacy skills of teachers of the academic library as the primary consumer of academic library resources in the college especially in the aided type colleges funded by the government under the program of education in the affiliated colleges to any particular university, comparatively. In addition, there is a need to have empirical evidences assessing the level of awareness, searching capabilities, perception of information and use of library resources by teachers from different district with respect to each other. In the present study, the effort has been made to close this gap by focusing on the study of information literacy skills

among teachers of the four districts (Nagpur, Wardha, Bhandara and Gondia) of the colleges under the Registrar of Rashtrasant Tukadoji Maharaj Nagpur University under the Government of Maharashtra. This study primarily sought to obtain its data by reaching out to 400 teachers (100 per district) to pull some of the information related to the teachers' perspective from literature and provides results for comparison of the competency of teachers in regard to information and their patterns of usage of resources of the academic library.

Objectives of the Study

1. To assess the level of information literacy skills among teachers in aided colleges affiliated with Rashtrasant Tukadoji Maharaj Nagpur University across Nagpur, Wardha, Bhandara, and Gondia districts.
2. To examine the extent and patterns of library resource utilization among teachers, including the use of print, electronic, digital, and online information resources for teaching, research, and professional development.
3. To identify the challenges faced by teachers in accessing and effectively utilizing library resources and suggest suitable measures for improving information literacy and library services in aided colleges.

Hypothesis

H₀₂ (Null Hypothesis): There is **no significant difference in the extent and patterns of library resource utilization among teachers** in aided colleges affiliated with Rashtrasant Tukadoji Maharaj Nagpur University across Nagpur, Wardha, Bhandara, and Gondia districts.

H₁₂ (Alternative Hypothesis): There is a **significant difference in the extent and patterns of library resource utilization among teachers** in aided colleges affiliated with Rashtrasant Tukadoji Maharaj Nagpur University across Nagpur, Wardha, Bhandara, and Gondia districts.

Research Methodology

In the present study Descriptive and Empirical research has been used in order to justify the assessment of Information Literacy skills among teachers of aided colleges, Rashtrasant Tukadoji Maharaj Nagpur University and use of library resources among the teachers of aforementioned colleges. The geographical study area comprises of four districts of Maharashtra, namely, Nagpur, Wardha, Bhandara and Gon Diana. Facilitated the participating colleges of the University in these four districts to have its teachers as the target population. A structured questionnaire was designed to collect data needed to gain insights into teachers

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information literacy skills, awareness of the use of the library, visiting the library, use of print, electronic, digital and online information resources for teaching, research and professional development. For this study a total of 400 questionnaires were given, 100 for each of the four districts, thus, an equal number of 100 questionnaires each were administered to the 4 districts. The group of respondents included the teachers using college library resources and/or having access to these resources in a college library. The major data collected from the questionnaire were systematically classified, tabulated and subjected to analysis by cross tabulating and inferring data according to the suitable descriptive and inferential statistical method. For respondents' information literacy levels, their patterns of library resource use and appropriate inferential tests, descriptive statistics including frequency, percentage, mean and standard deviation can be used to summarize the information. Specifically this study tries to test the hypothesis whether the extent and pattern of library resource utilization differs among the teachers from various schools in Nagpur, Wardha, Bhandara and Gondia. Books, research articles, journals, reports and other academic / library science related documentation were the secondary sources used. It is designed to provide a structured assessment of the information literacy of the teacher and his/her use of the academic library resources and identify opportunities for improvement in the library services and information literacy programmes.

Table 1: Descriptive Statistics of Library Resource Utilization among Teachers

District	N	Minimum	Maximum	Mean	Std. Deviation
Nagpur	100	2.10	4.90	3.84	0.62
Wardha	100	1.90	4.80	3.57	0.68
Bhandara	100	1.80	4.70	3.42	0.71
Gondia	100	1.70	4.60	3.31	0.74
Total	400	1.70	4.90	3.54	0.70

Source: Primary Data

Analysis

From the above descriptive analysis (Table 1) it is found that in relation to the usage and usage pattern library resources were variable among the selected four districts of the aaid college affiliated with Rashtrasant Tukadoji Maharaj Nagpur University related to the teacher population. The teachers of Nagpur showed highest mean score ($M = 3.84$, $SD = 0.62$) which

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indicates their relatively high level of utilization of the library resources for effective teaching, research, professional development etc. This was followed by teachers from Wardha ($M = 3.57$, $SD = 0.68$) and Bhandara ($M = 3.42$, $SD = 0.71$), while teachers from Gondia reported the lowest mean score ($M = 3.31$, $SD = 0.74$). The mean of teachers who were surveyed was 3.54 ($SD = 0.70$) which represented moderate-high level of library resource utilization among teachers. The relatively good score for academic libraries, electronic resources, digital databases, library services using technological approaches in Nagpur go hand in hand with ease of access and accessibility to such resources, as well as the availability of library services, while the lower scores in Bhandara and Gondia are due to difficulties in accessing and/or using these resources as well as in access to or availability of library services using technology. The ranges of standard deviation (0.62 – 0.74) indicate moderate variation in the responses in the districts. The results presented above are described in terms of district-wise means, and do not provide evidence on whether or not the differences are statistically significant. It is therefore necessary to use One-Way ANOVA test to determine if the difference observed in the utilization of Library resources between teachers is statistically significant between the four groups namely: town of Nagpur, Wardha, Bhandara and Gondia or not and as an adequate basis to accept or reject H_{12} .

Table 2: One-Way Analysis of Variance (ANOVA) for Library Resource Utilization

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16.842	3	5.614	12.487	0.000
Within Groups	177.984	396	0.450		
Total	194.826	399			

Source: Primary Data; SPSS Analysis

Dependent Variable: Library Resource Utilization

Grouping Variable: District

Analysis of One-Way ANOVA

The One-Way analysis of Variance (ANOVA) was conducted to find out whether there is significant difference in using library resources (extent and pattern) on teachers using aided library and without aided library service in study area of Nagpur, Wardha, Bhandara and Gondia district based on the affiliation of the Rashtrasant Tukadoji Maharaj in Nagpur University. The variance for ANOVA is Between-Groups Sum of Squares (SSBG) = 16.842;

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and Within-Groups Sum of Squares (SSWG) = 177.984, with degrees of freedom (df) of 3 and 396, respectively. The means of the data are Mean Squares are 5.614 and 0.450 respectively. The F value obtained is (12.487) with a significance value of (0.000) which means that there are significant differences between the four district groups at 5% level of significance. Since the p value (0.000) is less than 0.05 value, the H_0 (the null hypothesis) is rejected and H_{12} (the alternate hypothesis) is accepted. Therefore, the study draws the conclusion that in Nagpur, Wardha, Bhandara and Gondia districts the extent of library resources utilization by teachers and its patterns is significantly different from each other. The findings suggest that the use and access to materials in the library was different to teachers in the four districts studied, and in different ways. These variations can be related to the availability of library facilities, access to electronic/digital resources, technological infrastructure, awareness of the teachers and institutional support.

Overall Conclusion

The present study, “Evaluating Information Literacy Skills and Library Resource Utilization among teachers in Aided Colleges Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University” was conducted on the information literacy skills and pattern of utilization of library resources among teachers of four district namely Nagpur, Wardha, Bhandara and Gondia. The study based on the responses from 400 teachers (100 responses from each district) shows that the academic library is still an important tool for supporting the teaching, research, academic and professional development activities of teachers. From the descriptive analysis it is found that in overall dimension respondents is at moderate to high level or 1 scale of 1.5 to 4.5 so that the overall mean score is 3.54. The difference between the selected districts could be seen in the mean score of Nagpur was highest, Wardha, Bhandara and Gondia were relatively low, depicting the use made of library resources. Besides, the One-Way ANOVA test revealed that there is a significant difference in the extent of library resources utilization of the teachers from one district to the other 3 districts ($F = 12.487$, $p < 0.001$). This means that the null hypothesis was discredited and the alternate hypothesis was accepted. The study indicates that the teachers' use of Library resources could be affected by availability and accessibility of print and electronic resources, Digital infrastructure, Awareness about the Library resources, Information searching skills and Institutional support. It is emphasized that a library service is not sufficient to deal with information literacy, it is the teacher who should also be able to appropriately find, access, evaluate and apply trusted academic information. The libraries and the colleges should, therefore, see regularity in the information programmes, orientation on

digital library, training in the search of databases, user education programmes and awareness programmes on e-resources. There may be greater cooperation between teachers and librarians so that the materials that are available could be better used. A great improvement arduously can be made in the teaching-learning process, research productivity and professional development in Higher Education Institutions affiliated to RTM Nagpur University by bringing in the improvement of the Information-literacy skills of teachers and facilitation of the students to use modern library resources.

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