



Contribution of Libraries to Quality Assurance in Higher Education Institutions of Maharashtra

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Abstract:

The role of libraries in higher education institutions (HEIs) has gained increasing importance with the growing emphasis on quality education and accreditation standards. This study examines the contribution of academic libraries in ensuring quality education in HEIs across the State of Maharashtra. The research employs a mixed-methods approach, combining a structured questionnaire survey of students and faculty, semi-structured interviews with librarians, and document analysis of institutional reports. The study focuses on key areas such as adequacy of collections, access to e-resources, infrastructure, staff support, and user satisfaction. Data will be analyzed using descriptive statistics, correlation, and regression techniques, along with thematic analysis of qualitative responses. The findings are expected to reveal a strong relationship between library facilities and academic performance, highlighting the library's role as a central pillar in the teaching-learning process. The study also proposes recommendations for enhancing digital infrastructure, strengthening information literacy, and aligning libraries with NAAC quality benchmarks.

Keywords: *Academic Libraries, Higher Education Institutions (HEIs), Library Services, Library Infrastructure, E-Resources, NAAC Accreditation, Information Literacy.*

Introduction:

Quality education is the cornerstone of higher education institutions (HEIs) worldwide, and in India, it has become a central focus with the growing influence of national and global accreditation frameworks. Among the various components that support teaching, learning, and research, academic libraries occupy a crucial position. They serve not only as repositories of knowledge but also as dynamic learning hubs that provide access to a wide range of print and digital resources, facilitate research, and promote information literacy among students and faculty.

In the Indian context, the National Assessment and Accreditation Council (NAAC) and the University Grants

Commission (UGC) have emphasized the role of libraries in enhancing institutional quality. Library infrastructure, collection development, e-resources, user services, and technology integration are considered vital indicators of academic excellence. Particularly in Maharashtra, one of India's leading states in higher education, with a large number of universities, autonomous colleges, and professional institutes, the library is integral to the pursuit of quality benchmarks. Despite the recognized importance of libraries, many institutions continue to face challenges related to limited budgets, inadequate digital infrastructure, and underutilization of resources. This raises pertinent questions: To what extent do libraries in Maharashtra's HEIs

contribute to quality education? How do students and faculty perceive their role in supporting academic performance and research outcomes? This study aims to address these questions by systematically examining the contribution of libraries to quality assurance in higher education across Maharashtra. By analyzing the availability and utilization of library services, the study seeks to highlight best practices, identify gaps, and recommend strategies for aligning libraries more effectively with the goals of quality education.

Statement of the Problem:

In the era of global competition and knowledge-driven economies, higher education institutions (HEIs) in India are under constant pressure to maintain and improve quality standards. Accreditation bodies such as the National Assessment and Accreditation Council (NAAC) have identified libraries as a vital component in the teaching–learning and research ecosystem. Despite this recognition, many academic libraries in Maharashtra continue to struggle with challenges such as limited budgets, inadequate digital infrastructure, uneven access to e-resources, lack of trained staff, and underutilization of services by students and faculty. The present study seeks to address these issues by systematically analyzing the role of academic libraries in ensuring quality education across higher education institutions in the State of Maharashtra.

Objectives of the Study:

1. To examine the current status of libraries in higher education institutions in Maharashtra.
2. To assess the role of libraries in the quality assurance process of higher education.

3. To analyze the impact of library services and facilities on students' and teachers' academic performance.
4. To suggest strategies and policy recommendations for improving library support in quality education.

Research Methodology:

The present study adopts a mixed-methods research approach, combining both quantitative and qualitative techniques to comprehensively examine the role of libraries in ensuring quality education in higher education institutions (HEIs) of Maharashtra. The quantitative component involves a structured questionnaire survey targeting students and faculty, aimed at assessing the adequacy, accessibility, and effectiveness of library resources and services. The qualitative component includes semi-structured interviews with librarians, principals, and NAAC coordinators to gather in-depth insights into library practices, challenges, and their contribution to teaching, learning, and research.

Data collection is carried out using structured questionnaires with Likert-scale items, semi-structured interviews, and analysis of institutional documents such as library policies, annual reports, and NAAC accreditation reports. Quantitative data will be analyzed using **descriptive statistics** (mean, frequency, and standard deviation), **correlation analysis** (Pearson), and **regression techniques** to examine the relationship between library facilities and academic outcomes. Qualitative data from interviews will be analyzed using **thematic analysis** to identify recurring patterns and insights.

The study's scope is limited to HEIs in Maharashtra, and findings may not be generalizable to institutions in other states.

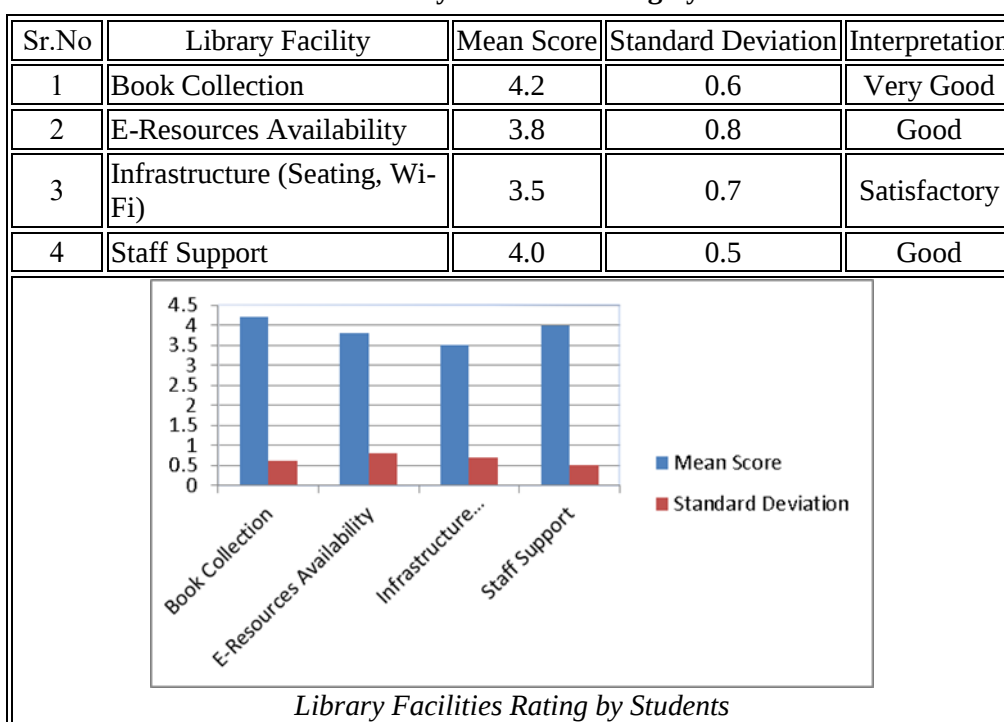
Additionally, self-reported data may include response bias, and access to some institutional reports may be restricted. Despite these limitations, the methodology provides a robust framework for understanding the contribution of libraries to quality education and for identifying strategies to enhance their effectiveness.

Data Collection, Analysis & Interpretation:

The study employs multiple tools to gather comprehensive data regarding the role of libraries in higher education institutions (HEIs) in Maharashtra. The tools are designed to capture both quantitative and qualitative information. A **Structured Questionnaire**

was distributed to students and faculty to assess perceptions of library resources, facilities, e-resources, infrastructure, and user satisfaction. Uses a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). **Semi-structured interviews** were conducted with librarians, principals, and NAAC coordinators to understand the qualitative aspects, including library management, challenges, and contributions to teaching, learning, and research. **Document Analysis:** Institutional documents like library policies, annual reports, and NAAC accreditation reports are reviewed to validate information collected through surveys and interviews

Table No.1 Library Facilities Rating by Students



The analysis of student responses reveals that the book collection received the highest mean score (4.2), interpreted as “Very Good,” indicating that the library’s printed resources are adequate and meet the academic requirements of students. Staff support (4.0) and study environment (3.9) were also rated positively, reflecting that students find the library staff cooperative and the overall

environment conducive for learning. The rating for e-resources availability (3.8) suggests that while students are fairly satisfied, there is scope to expand access to digital databases, online journals, and e-books. The lowest score was observed for infrastructure (3.5), which only reached the “Satisfactory” level, pointing towards the need for improved seating arrangements, extended Wi-Fi

coverage, and modern study spaces. Overall, the findings show that while the library fulfills its academic role effectively, improvements in infrastructure and digital access can further enhance the quality of services provided to students.

Table No.2: Student Ratings of Library Facilities

Facility	Mean Score
Book Collection	4.2
E-Resources Availability	3.8
Infrastructure	3.5
Staff Support	4.0
Study Environment	3.9

The data shows that the Book Collection scored the highest mean (4.2), suggesting students are very satisfied with the range and quality of books available in the library. Staff Support (4.0) and Study Environment (3.9) also received good ratings, reflecting the helpfulness of library staff and the overall atmosphere for study. E-Resources Availability (3.8) indicates moderate satisfaction, but it also highlights the need for expansion of access to online databases and digital platforms. The lowest score was recorded for Infrastructure (3.5), which only reached a satisfactory level, pointing to gaps in seating capacity, Wi-Fi facilities, and modern physical spaces. Overall, the analysis suggests that while core resources and support services are strong, the library must prioritize improvements in infrastructure and digital resource access to better meet the academic needs of students.

Table 3: Faculty Perception of Library Support

Library Service	Mean Score	Standard Deviation	Interpretation
Research Support	4.1	0.6	Very Good
Teaching Resource Access	3.9	0.7	Good
Training / Workshops	3.6	0.8	Satisfactory
E-Resource Accessibility	3.8	0.7	Good
Staff Assistance	4.0	0.5	Good

The analysis indicates that Research Support received the highest mean score (4.1), showing that libraries are playing a strong role in facilitating research activities for faculty. Staff Assistance (4.0) and Teaching Resource Access (3.9) were also rated positively, highlighting that library staff are supportive and the collection is reasonably helpful for teaching needs. E-Resource Accessibility (3.8) was considered good, though faculty expect more seamless access to online databases and journals.

The lowest rating was observed for Training/Workshops (3.6), suggesting that professional development and user orientation programs need to be improved. Overall, the data reflect that libraries are well-regarded in supporting teaching and research, but more focus is required on capacity-building activities like training and workshops.

Table 4: Frequency of Library Usage by Students

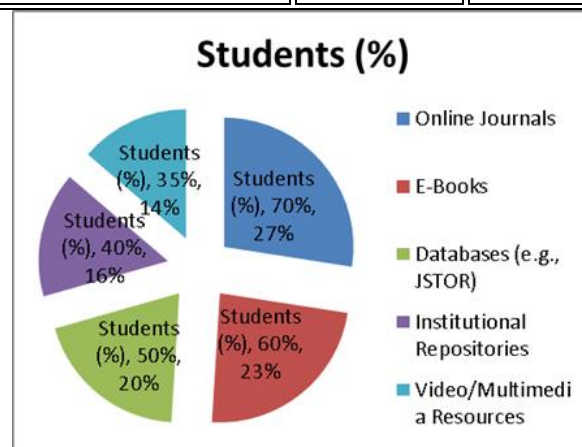
Frequency of Use	Number of Students	Percentage
Daily	120	24%
2–3 times per week	180	36%
Once a week	100	20%
Occasionally	60	12%
Never	40	8%

The analysis shows that the largest proportion of students (36%) use the library 2–3 times per week, reflecting regular engagement with library services. About one-fourth (24%) of students visit the library daily, indicating a highly active group of users. A significant portion (20%) access the library once a week, while 12% use it only occasionally. Notably, 8% of students reported never using the library, which signals a small but important gap in user outreach and awareness. Overall, the findings suggest that most students rely on library facilities frequently, but strategies are needed to encourage occasional or non-users to make better use of the resources available.

Table 5: E-Resource Utilization by Students and Faculty

E-Resource Type	Students (%)	Faculty (%)
Online Journals	70%	85%
E-Books	60%	75%
Databases (e.g., JSTOR)	50%	65%
Institutional Repositories	40%	55%

E-Resource Type	Students (%)	Faculty (%)
Video/Multimedia Resources	35%	45%

**E-Resource Utilization by Students and Faculty**

The analysis reveals that **faculty members consistently use e-resources more than students**, with the highest usage observed in **online journals** (85% by faculty, 70% by students). **E-books** also show high utilization (75% by faculty and 60% by students), confirming their role as essential academic resources. Databases such as JSTOR are accessed by 65% of faculty compared to 50% of students, reflecting a stronger faculty dependence on specialized resources. **Institutional repositories** (55% vs. 40%) and **video/multimedia resources** (45% vs. 35%) are comparatively underutilized, suggesting limited awareness or training in these areas. Overall, the findings highlight the growing importance of digital resources in teaching and research, while also pointing to the need for awareness and training programs to increase student usage of advanced e-resources.

Table 6: Correlation between Library Use and Academic Performance

Variable	Correlation Coefficient (r)	Significance (p-value)
Library Visit Frequency	0.62	0.001 (Significant)
E-Resource Use	0.55	0.002 (Significant)
Staff Assistance	0.48	0.005 (Significant)

The data indicates a strong positive correlation between **library visit frequency** and **GPA** ($r = 0.62$, $p = 0.001$), meaning students who visit the library more often tend to achieve higher academic performance. **E-resource use** also shows a significant positive correlation with GPA ($r = 0.55$, $p = 0.002$), highlighting the importance of digital resources in enhancing learning outcomes. **Staff assistance** demonstrates a moderate but meaningful correlation ($r = 0.48$, $p = 0.005$), suggesting that guidance from librarians contributes positively to academic success. Since all correlations are significant at the 0.01 level, the findings clearly establish that effective utilization of library resources directly supports better academic achievement.

Findings:

The study found that students are highly satisfied with the **book collection**, which supports their academic learning effectively. However, **infrastructure facilities** such as seating arrangements and Wi-Fi connectivity received the lowest ratings, showing a gap in physical resources. Faculty members appreciated the **research support** and staff assistance provided by libraries, but highlighted a lack of effective workshops and training programs. Student usage patterns showed that most visit the library **regularly (2–3 times per week)**, though a small percentage still remains non-users. Importantly, a strong positive relationship was established between **library usage, e-resource utilization, staff guidance, and students'**

academic performance (GPA), confirming the vital role of libraries in quality education.

Recommendations:

To strengthen their role in higher education, libraries should prioritize **upgrading infrastructure** by improving seating capacity, Wi-Fi facilities, and creating modern study spaces. Greater investment is needed in **digital resources**, such as e-books, journals, and databases, along with training programs to promote effective use among students. Regular **workshops and awareness programs** can help increase participation of both students and faculty, especially occasional or non-users. Libraries should also enhance **research support services** through plagiarism-check tools, citation guidance, and data management support. Finally, **capacity-building programs for library staff** will ensure more efficient service delivery and meet the evolving needs of higher education institutions in Maharashtra.

Conclusion:

The present study highlights the significant role of libraries in enhancing the quality of education in higher education institutions across Maharashtra. Students expressed the highest satisfaction with the **book collection**, which continues to serve as the backbone of academic learning. Faculty members strongly appreciated **research support and staff assistance**, showing that libraries contribute meaningfully to teaching and research activities. However, both students

and faculty identified gaps in **infrastructure and training programs**, which limit the full potential of library services.

Analysis of usage patterns revealed that most students visit the library regularly, though a small percentage still do not use the facilities, pointing towards the need for outreach. The study also found that **faculty members rely more heavily on e-resources than students**, underlining the importance of digital literacy and awareness among learners. Importantly, the statistical correlation showed that higher levels of library usage, e-resource access, and staff guidance significantly improve academic performance.

Overall, the findings confirm that libraries are not only resource centers but also **key partners in academic success and quality assurance**. To strengthen their role further, libraries must focus on **modern infrastructure, digital resource expansion, and skill-building programs**, thereby positioning themselves as central hubs of knowledge in the higher education ecosystem.

Reference:

1. Association of College & Research Libraries. (2018). *Standards for libraries in higher education*. American Library Association.

2. Bhatt, R. K. (2015). The impact of e-resources on academic performance of students in higher education. *Library Philosophy and Practice*, 1–12.
3. Kumar, K., & Sharma, N. (2017). Role of academic libraries in quality education: A study. *International Journal of Library and Information Studies*, 7(2), 45–53.
4. Lokhande, S. L. (2021). Library services and their impact on research productivity: A case study of Indian universities. *Journal of Library Science Research*, 10(3), 55–63.
5. Singh, J., & Mahajan, P. (2019). Usage and impact of library resources on academic performance of students: An empirical study. *DESIDOC Journal of Library & Information Technology*, 39(2), 98–104.
6. UNESCO. (2020). *the role of higher education in sustainable development*. UNESCO Publishing.
7. Wilson, P. (2022). Academic libraries and student success: Evidence-based practices for quality enhancement. *College & Research Libraries*, 83(4), 567