



Information Literacy Initiatives in Libraries of Select Indian Institutions of National Importance: An Exclusive Viewpoint of Librarians

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This study aims to understand how library professionals are planned, delivered, and promoted by exploring real-life practices rather than relying on a theoretical framework with the help of the Big6 model of IL. The research employed a survey method using a Google Form questionnaire, adopting a descriptive research design using a quantitative survey method, with 38 library professionals participating.

The findings indicate that library orientation sessions are one of the most impactful methods for providing services in selected libraries for delivering information literacy to users. Libraries face challenges in implementing or organizing information literacy due to a lack of active participation, limited staff expertise, resistance to change, or adoption of new methods. Researchers have proposed that faculty should be instrumental in motivating and mobilizing students to undertake information literacy programs that their libraries offer. The study reveals that no credit score system in institutions is awarded for participating in IL programs offered by their libraries. It is imperative that this model of add-on (2/3) credit scores in the academic curriculum may prove to be an important component in the academic learning outcomes of the students. The study suggests and concludes that there is an urgent need to work systematically on the policies and standards that offer guidelines and strategies for revamping information literacy by integrating the information literacy concept into the curriculum of HEI's academic program for all categories of students (Undergraduate, Post Graduate, Professional Courses like B.Tech, M.Tech, M.BA, etc.) as a mandatory course.

Keywords: Information Literacy (IL), Information Literacy Programs, Information Literacy Initiatives, Indian Higher Education Libraries, Indian Institutes of Management (IIMs), Indian Institutes of Technology (IITs), Indian Institutes of Science Education and Research (IISERs), Institutional Curriculum, Credit Scores, Institutes of National Importance, Big6 Model of IL

Introduction

Information literacy (IL) is not a new area for research. The term was first used by the President of the Information Industry Association, Paul Zurkowski. He stated that information-literate persons were “people trained in the application of resources to their work”. This refers to recognizing the need for information, locating and accessing it effectively, and using it purposefully, Chevillotte¹⁴, so that “individuals can locate, evaluate, and effectively use information. It involves skills such as searching for reliable sources, critically assessing information, and using that information for actions such as research or problem-solving. Libraries, as information spaces, promote and teach information literacy to patrons” Zou⁴⁶. Libraries play a central role in providing IL

through well-defined instruction. “IL is often confused with related literacies such as digital, media, and network literacy. However, it is essential to distinguish it, as IL focuses more on the ability to recognize information needs, locate, evaluate, and effectively use information” Bawden¹³.

Many associations define the IL concept and make standards globally, such as

- ALA⁵ issued a report and defined information literacy.
- The International Federation of Library Associations and Institutions also promotes and leads the development of IL at a global level (IFLA²¹).
- ACRL¹⁰ has made five standards, 22 performance indicators and a framework for higher education

and talks about core ideas where librarians and their partners in higher education.

There are many frameworks and models, such as the ACRL, IFLA frameworks. Models like the Search Process Model, The 8Ws by Lamb, Jamie McKenzie's Model of IL, Seven Faces of Information Literacy, PLUS Model, Big6 Skills, and The Seven Pillars of Information Literacy. These models guide the process of accessing, evaluating and using information. Although a global framework exists, there is a lack of standardisation in IL practices in Indian higher education. However, all institutions differ in their infrastructure, properties, and users' needs. The present study adopts the Big6 Model Eisenberg¹⁵, which provides a structured approach to covering task definition, information seeking strategies, location and access, use of information, synthesis and evaluation. This model serves as an analytical and practical model for the assessment of IL implementation in this research.

Scope of the Study

This study aims to understand how library professionals plan, deliver, and promote IL by exploring real-life practices rather than relying on a theoretical framework in selected libraries such as Indian Institutes of Management (IIMs¹⁸), Indian Institutes of Technology (IITs¹⁹), and Indian Institutes of Science Education and Research (IISERs²⁰).

Highlights of the study are:

- IL implementation practices from the librarian's perspective.
- Evaluating IL practices by using the Big6 Model.
- Offering comparative insights among different types of institutions (IITs, IIMs).

Research Questions and Objectives

The present study focused on:

- How are IL programs planned, scheduled and delivered across selected libraries by exploring real-life practices?
- How does the know-how for implementing and addressing challenges in IL differ among libraries?
- Does a comparative study between IITs and IIMs in areas, services, and methods to deliver information literacy programs assist in reaching learning outcomes in IL programs?

Research Objectives

- To analyze the management and preparation of IL initiatives in libraries.

- To identify and assess challenges faced by libraries in implementing IL initiatives.
- To compare and evaluate the effectiveness of IL program delivery methods between IITs and IIMs.

Review of Literature

This section reviews relevant literature on Information Literacy (IL) programs, including studies from both the Indian context and neighbouring countries to provide a broader perspective. The goal is to present a well-rounded understanding of IL by capturing diverse viewpoints. To ensure systematic analysis, the literature is categorised into key themes: Standard, Methods of Instruction, Tools, and Challenges in planning and implementing.

Standard and Framework of IL

Several studies discuss the importance of models, standards, and frameworks. They are crucial to follow in information literacy (IL) practices to establish global standards in the field of IL (ACRL¹⁰; Eisenberg¹⁵; Lloyd²⁴; Koehler and Mishra²³; Mariyan and Naveen²⁷).

Methods to Deliver IL to Users

Various methods are employed to effectively deliver Information Literacy (IL) programs to users. Many studies emphasize the use of instructional materials, such as tutorials with pre-recorded videos, on-demand instructions, and live sessions, to help users locate, access, evaluate, and utilize information efficiently Karisiddappa and Rajgoli²². Tailored instruction methods, including lectures, hands-on activities, visual aids, and interactive discussions, are also highlighted as effective approaches, moving beyond a one-size-fits-all model (Aharony and Brontein²; Singh⁴⁰; Adhikari and Joshi¹).

IL initiatives further include library orientation sessions and publications to familiarize users with resources Baro, Seimode, and Godfrey¹². Research shows that one-on-one sessions and online instructions are among the most effective ways to impart IL (Alexander and Smith⁴; Madhusudan²⁶; Omar, Haji and Mwitumbe³³; Yearwood, Foasberg and Rosenberg⁴⁵; Vinent⁴³; Morris³²; Harrison and Deans¹⁶; Wema⁴⁴). Additionally, seminars, workshops, and awareness programs play a crucial role in promoting IL, providing practical platforms for users to engage with library services and develop essential information skills.

Tools Used to Provide IL

Tools are essential for delivering Information Literacy (IL) programs, enabling users to become more proficient in locating, accessing, evaluating, and utilizing information. Emerging technologies and Web 2.0 tools play a pivotal role in enhancing IL efforts. Studies showcase the use of social media and digital platforms, such as YouTube for training videos, Facebook groups, informative blogs, Instagram, Wikipedia, Twitter, and Lib-Guides, as effective channels for expanding the reach of IL programs (Arya⁹; Meena²⁹). These platforms foster greater engagement and interaction among users, helping libraries connect with a broader audience (MacBride²⁸; Mishra³¹; Shire and McKinney³⁹).

Furthermore, Wema⁴⁴ underscores the significance of Virtual Learning Environments (VLEs), which incorporate tools like blogs and podcasts to facilitate the delivery of IL programs. Together, these tools create dynamic and interactive learning experiences, making IL accessible and engaging for diverse user groups. This section could benefit from specific examples of successful implementations of these tools in libraries, illustrating how they facilitate learning outcomes.

Challenges in Implementing IL

Several studies have identified several challenges in the effective delivery and implementation of Information Literacy (IL) programs. Key obstacles include inadequate resources and the absence of formal IL policies (Lwehabura and Stilwell²⁵; Baro and Keboh¹¹). Limited support from parent organizations and a lack of opportunities further hinder the successful integration of IL into higher education. Rajaram³⁶ outlines additional challenges, such as insufficient technological infrastructure, limited IT skills, reliance on traditional education systems, poor collaboration between libraries and teaching faculty, and a lack of financial and human resources (Baro, Seimode and Godfrey¹²; Omar, Haji and Mwitumbe³³; Pattar and Hadagali³⁵; Hicks and Lloyd¹⁷).

Other barriers such as low literacy rates, minimal demand for library services, inadequate time allocation, lack of time, inadequate training of staff (Vijesh and Ganesan⁴²; Ranganatha, Joteshna and Mahadevan³⁷) and students' indifferent attitudes toward IL programs. Pattar³⁴ emphasise further issues, including the absence of a well-designed IL curriculum, a shortage of skilled professionals, and

low student motivation for learning. Collectively, these challenges call attention to the need for stronger institutional support, improved collaboration, better infrastructure, and more effective strategies to promote IL.

In summary, the reviewed literature indicates a critical need for libraries to enhance their IL initiatives, focusing on diverse delivery methods and the utilisation of modern tools.

Many existing studies have been either theoretical or limited to a few institutions. It has been found that a significant gap exists from a librarian-centric perspective on IL practices, challenges, and strategies. This study aims to address this gap by focusing on how IL is designed, delivered, and promoted across a diverse range of institutions. It aligns with the globally recognised Big6 Model in defining and designing IL in these institutions.

Research Methodology

Research Design

The present study adopts a descriptive research design using a quantitative survey method. The study focuses on the Big6 Model, which tries to examine the planning, delivering, and challenges in implementing IL programs in selected Institutions of National Importance in India.

Target Population

The target population of the study was library professionals from institutions. A total of 51 libraries were selected: 23 from IITs, 21 from IIMs, and 7 from IISERs.

Tool of Data Collection and Analysis

A structured questionnaire was developed using Google Forms to collect data (Baro & Zuokemefa, 2011; Anyaoku, Ezeani and Osuigwe⁷). The questionnaire was structured into two main sections:

- **Demographic Information:** The first section focused on collecting basic respondent information to contextualize the data.
- **Library Services and Information Literacy Programs:** The second section gathered detailed insights into library activities and IL initiatives within the selected libraries, and this section primarily featured closed-ended questions to streamline responses, although an open-ended question was included to allow participants to elaborate on the resources and circumstances influencing their IL programs.

A total of 51 questionnaires were distributed exclusively to library professionals, with their email addresses, which were obtained from institutional library websites or personal contacts. Distribution involved sending questionnaires as email attachments, accompanied by a consent letter to ensure respondent confidentiality. To improve the response rate, follow-ups and reminders were sent. Before distribution, a pilot study involving three institutional librarians helped identify areas for refinement, enhancing clarity and relevance in the final questionnaire. Data was collected between May and June 2024, with 38 responses received, yielding a strong response rate of 74.50%. However, two responses were incomplete and excluded, resulting in 36 fully completed responses for analysis. All responses were downloaded, printed, and analysed. Descriptive statistical methods—such as frequency and percentage analysis—were employed to examine the data and generate insights into the librarians' perspectives (Arenas⁸; Anyaoku⁶; Shields³⁸; Aharony, Julien and Nadel-Kritz³).

The questionnaire is based on the Big6 Skills model developed by Mike Eisenberg and Bob Berkowitz in 1990, which “provides a definitive set of skills that students must master to be successful in any learning context” Eisenberg¹⁵. Each question of the questionnaire is designed to specify a component of the Big6 skills model to explore library professionals' roles in implementing IL, and these components of the model are:

1. Task Definition- Understanding users' needs and the purpose of IL programs

- Does your institutional library offer information literacy programs/ user assistance to its users?
- For whom (target users) does your library offer information literacy programs?
- In which of the following core areas do you provide information literacy programs?

2. Information Seeking Strategies- Identifying possible sources and strategies

- How do you plan your IL programs?
- With which of these collaborators do you plan information literacy programs?
- What are the strategies to plan and execute credit-based IL initiatives?

3. Location and Access -How information is accessed and retrieved

- Where do you provide information literacy programs?

- How do you assist your users?
 - How frequently does your institutional library conduct IL programs?
- 4. Use of Information -How information is engaged with or utilized**
- What are ways to promote an information literacy program to your users?
 - How do you receive feedback from the users about your IL programs?
- 5. Synthesis- Presenting information effectively**
- Are students awarded credit scores for participating in IL programs? How long has this credit score initiative been in effect?
- 6. Evaluation - Judging the effectiveness and quality of IL programs**
- Do you face any challenges in organizing IL programs in your library?
 - Do you agree with the statement: “Faculty should play a pivotal role in motivating and mobilizing students to undertake IL programs”?
 - Kindly mention your future IL programs.
 - Suggestions to improve information literacy programs for the institutional library.

Findings and Discussions

As shown in Table 1 which reveals the demography of respondents, it is found that the higher percentage of surveyed respondents 34 (89.47 %) were male and 04 (10.52 %) were female. Most respondents (63.16 %) have a Ph.D. degree, (34.21 %) have a Masters in LIS and only (2.63 %) have a professional certificate in LIS. The majority of respondents (47.37 %) were in the 46-55 years age

Table 1 — Respondents' Demography

Gender	Frequency	Percentage
Male	34	89.47
Female	4	10.53
Educational Qualification		
Masters in LIS	13	34.21
M.Phil./Ph.D.	24	63.16
Post Graduate Diploma Certificate	1	2.63
Age		
25-35	7	18.42
36-45	9	23.68
46-55	18	47.37
above 55	4	10.53
Job-Experience		
below 5	1	2.63
6-10,	6	15.79
11-15,	6	15.79
above 16	25	65.79

group. Regarding job experience, most of the respondents (65.79%) have job experience of above 16 years.

As Table 2 highlights all general methods that are used and planned in all selected libraries, most libraries (94.7 %) use the library orientation session method to provide information literacy programs followed by individual instruction (86.8 %), guided library tours, and training manuals (81.6 %), workshop programs (76.3 %), and expert lectures (68.4 %). Other responses were self-instructional online and tutorial methods to deliver information literacy to their users.

Figure 1 reveals frequency and how often IL programs are conducted within selected libraries, underscoring the need for regularity. This study aligns with findings, showing that 86.8% of libraries conduct IL programs only upon user demand, while 47.4% offer them annually. It discusses here that it is inappropriate to provide services only on demand to the users, hence libraries should keep promoting the services themselves from time to time.

Figure 2 outlined significant collaboration patterns in IL program planning at selected libraries, with publishers or their representatives participating in

81.6% of these initiatives. followed by product vendors (76.3 %), skilled professionals, and teamwork (73.7 %) as they display shared interest in planning. It is noteworthy to mention here that there must be involvement of faculty with librarians in planning IL programs because faculty have subject discipline knowledge. They can help in better ways to plan and promote IL programs.

Table 3 shows the target groups for IL programs. It is found that information literacy (IL) programs are primarily designed for postgraduate students (94.7%), followed by faculty members (81.6%), undergraduate students (63.2%) and new users only (31.6%). Other respondents mentioned offering IL programs to research scholars/Ph.D. students and library visitors. The study discusses here that it is very important that IL programs mostly should be designed for undergraduate and new users of libraries as they are new for the library, library staff, resources, services etc. Therefore, IL programs would be benefitted for them.

Figure 3 shows that a significant portion (71.1%) of libraries conduct information literacy (IL) programs in physical lecture halls, followed by Class Room 39.5 %. It is also noted that libraries offering IL programs are being offered physically in the library hall with a structured learning environment. However, the availability of online options, like webinars, is also notable, as it increases accessibility, allowing users to participate from anywhere at any time. This dual approach—blending traditional in-

Table 2 — General Methods to Provide IL for Users in Selected Libraries

Methods	Frequency	Percentage
Library Orientation Sessions	36	94.7
Guided library tour	31	81.6
Audio/Video Lecture	16	42.1
Expert Lectures	26	68.4
Training Manuals	31	81.6
Workshop Program	29	76.3
Individual Instruction	33	86.8
Hands-on Instruction in Computer Lab	22	57.9
Social media	19	50
Group Instructions Courses	20	52.6

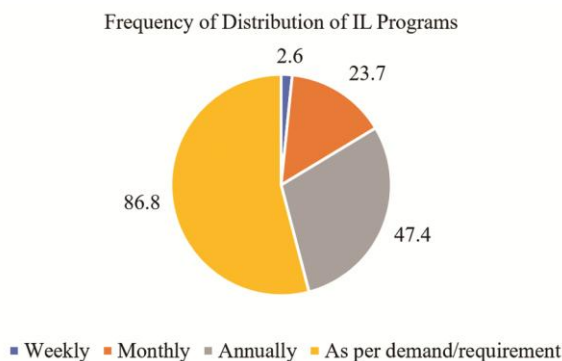


Figure 1 — Frequency of Distribution of IL Programs

Table 3 — Target Groups for IL Programs

Target Groups	Frequency	Percentage
Undergraduate	24	63.2
Postgraduate	36	94.7
Project staff	18	47.4
Faculty members	31	81.6
Administrative staffs	22	57.9
New users only	12	31.6

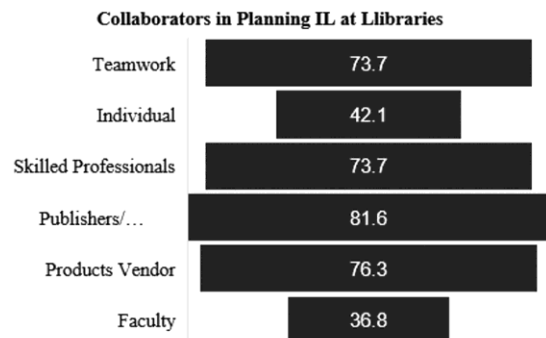


Figure 2 — Collaborators in Planning IL at Libraries

person sessions with online access—broadens the reach of IL initiatives and ensures users can flexibly engage with library resources, aligning with the evolving needs of remote and digital learning.

Table 4 presents the core areas where information literacy (IL) programs are offered across the selected libraries.

The data reveals that a significant majority (92.1%) of these libraries focus on training users to utilize library resources, including books, magazines, reference materials, and OPAC (Online Public Access Catalogue). This is followed closely by instructions on using e-resources such as databases and journals (89.5%). A considerable portion (84.2%) of libraries also emphasize digital library usage, plagiarism awareness, and the ethical use of information, ensuring users understand how to engage with information responsibly. Furthermore, IL programs cover topics like copyright awareness and bibliographic management tools, such as Mendeley and Zotero, with 73.7% of libraries offering guidance in these areas.

Table 4 — Core Areas Covered in IL Programs for Users

Areas	Frequency	Percentage
Library resources	35	92.1
Online Public Access Catalogue (OPAC)	35	92.1
Search strategies (such as Boolean logic)	26	68.4
Use of open educational resources	24	63.2
Use of digital library	32	84.2
Plagiarism awareness	32	84.2
Ethical use of information	32	84.2
Copyright awareness	28	73.7
How to use e-resources (e.g. Journals, books, databases, etc.)	34	89.5
Citation of information	27	71.1
Institutional Repository	25	65.8
Bibliographic management tools	28	73.7

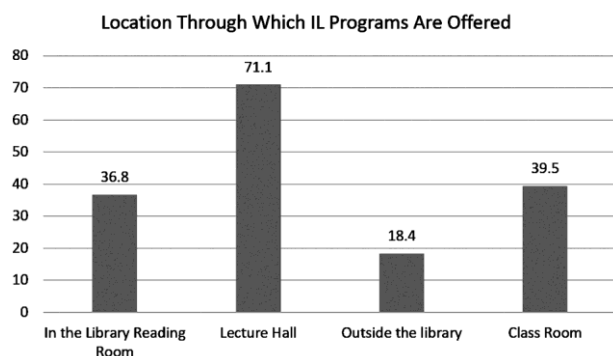


Figure 3 — Location Through Which IL Programs are Offered

Additional responses shed light on the inclusion of specialised tools and support services, such as grammar-checking software (e.g., Grammarly, ProWritingAid), creating author profiles and submitting academic work, research workshops, and research paper writing techniques. These efforts underscore the holistic approach taken by libraries, aiming not only to impart essential research skills but also to enhance students' academic writing, publication efforts, and overall research productivity.

Figure 4 demonstrates diverse feedback methods used by libraries to assess the effectiveness of their information literacy (IL) programs. Online forms are the most common method (57.9%), providing a convenient, scalable way to gather responses. Verbal feedback, used by 55.3% of libraries, offers real-time insights and allows for immediate clarification. Written feedback (39.5%) and MCQs (36.8%) further aid in gauging users' understanding and satisfaction levels. These varied approaches ensure libraries collect both qualitative and quantitative data, offering a fuller picture of user experiences. This comprehensive feedback is vital for refining IL programs to better meet users' needs and improve learning outcomes.

Table 5 illustrates the various ways that libraries promote information literacy (IL) programs to users. It is found that the majority of libraries (63.2%) utilize flyers as a promotional method. Flyers are

Table 5 — Ways to Promote IL Programs to Users

Ways to promote	Frequency	Percentage
Flyer	24	63.2
Banners	14	36.8
Social media (Facebook, Instagram, YouTube, etc.)	18	47.4
Posters	20	52.6

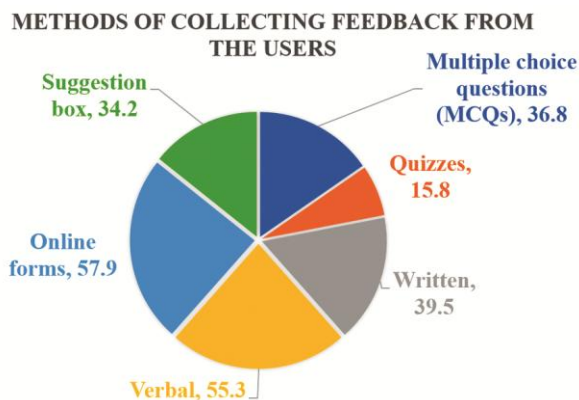


Figure 4 — Methods of Collecting Feedback from the Users about IL Programs

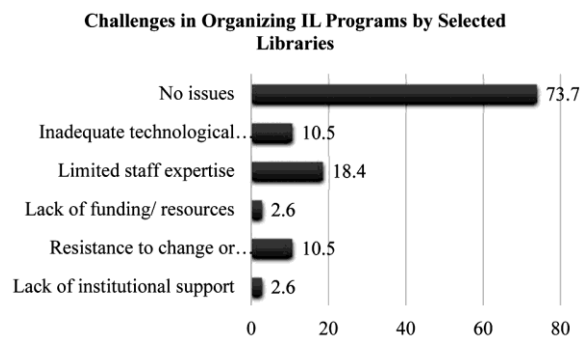


Figure 5 — Challenges in Organizing IL Programs by Selected Libraries

considered an effective resource because they are a convenient and cost-effective way to reach users at library entry and exit points. Following this, the poster method (52.6%) is also a good approach for libraries to promote their online programs.

Additional responses indicate that libraries use emails to keep users informed about their plans and programs, along with internal communication channels, registration forms, and Zoom sessions for online engagement. However, it is noteworthy that only 47.4% of libraries have adopted social media platforms, such as Facebook and Instagram, for promotion. Given the increasing use of digital technology and smartphones, social media can significantly expand outreach, as people can access information at their fingertips. Therefore, libraries should enhance their use of social media to raise awareness among users about their programs and services.

Figure 5 shows the main challenges faced by libraries in organizing information literacy (IL) programs. The present study uncover that most libraries (73.7%) currently report no major issues, suggesting substantial progress in resource availability. This positive outlook indicates enhanced access to resources and infrastructure, facilitating IL program organization.

However, challenges persist for some libraries, with 18.4% of respondents citing limited staff expertise as a barrier to delivering effective IL programs. Additional issues include reluctance to adopt new methods and insufficient active participation from library staff, both of which can affect program success. Addressing these challenges could further strengthen IL initiatives, ensuring more consistent and impactful program delivery across all libraries.

Table 6 — Comparative Table of Primary Services to Offer IL Programs by Selected Libraries (IIMs and IITs)

Services	IIMs	IITs	Frequency	Percentage
Lending the materials/documents	15	16	31	96.88
Reservation of document	16	14	30	93.75
Inter-library loan (ILL)	14	15	29	90.63
Reference service	16	16	32	100.00
Bibliographical service	15	14	29	90.63
Current Awareness	14	15	29	90.63
Selective dissemination of information (SDI)	14	10	24	75.00
Newspaper clippings	14	8	22	68.75
Photocopying service	13	10	23	71.88
Book bank	4	2	6	18.75
Career counselling and guidance	3	6	9	28.13
Internet browsing	14	15	29	90.63
Translation service	2	9	11	34.38
Document delivery	11	15	26	81.25
Online journal/database search	15	16	31	96.88
Others Responses-	1	-	1	3.13
1. Special service to visually impaired students				
2. Remote Access	1	-	1	3.13
3. Union Catalogue	1	-	1	3.13
4. Case studies	1	-	1	3.13
5. Library skill/blogs/emails	1	-	1	3.13
6. Research Consultation	1	1	2	6.25
7. Technology Infrastructure for Knowledge Generation	1	-	1	3.13
8. Academic Writing Tools	1	-	1	3.13

While IITs, IIMs, and IISERs serve distinct educational mandates and specialized programs, this study endeavours to provide a comparative overview of general trends in areas, services, and methods related to information literacy (IL) initiatives within these Institutes of National Importance. The analysis primarily focuses on IITs and IIMs, as their higher response rates yield a more robust basis for understanding IL practices. Due to a lower response rate from IISERs, they are excluded from this comparison, although their contributions remain relevant for future studies. This approach aims to clarify the current ground realities of IL efforts and services in these prominent institutions.

The comparative overview (Table 6) of primary services offered by IITs and IIMs illustrates significant similarities and some distinctions in the library offerings of these prestigious institutions. Notably, reference services are universally available

(100%) across both IIT and IIM libraries, indicating a strong commitment to user support in information retrieval and assistance.

Lending materials and access to online journals/databases follow closely at 96.88%, reflecting the libraries' focus on providing essential resources for academic research. Services like document reservation (93.75%) and inter-library loans, along with bibliographic services and current awareness initiatives (90.63%). The availability of document delivery services (81.25%) further enhances user convenience, allowing for seamless access to materials. Other answers have been provided such as tailored services for visually impaired learners, remote access, and tools for academic writing—were mentioned (3.13% and 6.25% respectively) with less frequency.

Overall, the comparison suggests that while both IITs and IIMs provide essential library services, IIMs appear to offer a wider array of support

resources. This may position IIMs as better equipped to cater to their user's varied academic and research needs, potentially enhancing their educational outcomes.

The comparative overview (Table 7) of information literacy (IL) program delivery methods at IITs and IIMs points out several key trends.

It is found that orientation sessions (100%) and individualized instruction (90.63 %) emerge as significant methods. Guided library tours (84.38 %) also play an essential method in enhancing user engagement, which allows students to navigate library spaces effectively and develop their information-seeking skills in a supportive setting. This approach is important for enhancing user engagement and making sure that students are aware of the tools and support available to them.

Interestingly, while tutorial methods (3.13 %) are utilized to a lesser extent, their inclusion suggests an openness to integrating technology and self-paced

Table 7 — Comparative Table of Methods to Offer IL Programs by Selected Libraries

Methods	IIMs	IITs	Frequencies	Percentage
Library orientation sessions	16	16	32	100.00
Guided library tour	13	14	27	84.38
Audio/video lectures (such as YouTube videos)	7	6	13	40.63
Expert lectures	11	10	21	65.63
Training manuals	14	11	25	78.13
Workshop program	12	13	25	78.13
Individualized instruction (one-on-one)	15	14	29	90.63
Hands-on instruction in the computer lab	11	6	17	53.13
Social media	8	6	14	43.75
Group instruction courses/subjects in the library	10	7	17	53.13
Others Response- 1. Tutorials	1	-	1	3.13

Table 8 — Comparative Table of Areas to Offer IL Programs by Selected Libraries

Areas	IIMs	IITs	Frequencies	Percentage
Library resources	16	16	32	100.00
Online Public Access Catalogue (OPAC)	15	16	31	96.88
Search strategies (such as Boolean logic)	12	12	24	75.00
Use of open educational resources	11	13	24	75.00
Use of digital library	14	15	29	90.63
Plagiarism awareness	12	13	25	78.13
Ethical use of information	14	13	27	84.38
Copyright Awareness	11	10	21	65.63
How to use e-resources (e.g., journals, books, databases, etc.)	15	15	30	93.75
Citation of information	12	11	23	71.88
Institutional Repository	9	13	22	68.75
Bibliographic management tools	13	12	25	78.13
Others Responses-	1	-	1	3.13
1. Author workshop				
2. How to write a research paper	1	1	2	6.25
3. AI/ML application in research	1	-	1	3.13

learning opportunities.

Overall, the findings suggested the importance of employing a range of instructional strategies in information literacy. It is revealed that a broader variety of methods employed by IIMs, in particular, indicates a more adaptable and innovative approach to service delivery, which could serve as a model for further developing IL initiatives in higher education libraries.

The comparative analysis (Table 8) of information literacy (IL) program areas covered by IITs and IIMs reveals a strong emphasis on foundational library skills. The coverage of "library resources" at 100 % indicates a critical commitment from both institutions to ensure that users are well-versed in accessing the materials available to them. This foundational knowledge is essential for fostering effective information-seeking behaviours among students.

Following closely, the focus on the online public access catalogue (OPAC) at 96.88% and e-resources usage at 93.75% emphasizes the value of digital literacy in today's academic landscape. These areas are crucial as they prepare students with the required skills to navigate digital platforms, an essential competency in modern research environments.

The inclusion of digital library usage at 90.63% further underscores the shift towards online resources, reflecting current trends in information access. This aspect of IL programming is vital for preparing them to engage with a broad array of digital tools and platforms that support their research endeavours. While the primary focus remains on these foundational areas, the mention of writing research papers and author workshops indicates a recognition of the advanced skills needed for academic success. The integration of topics like AI applications and citation tools, although less frequently addressed, signifies an awareness of emerging technologies and their relevance in research practices.

Suggestions and Recommendations

There are some examples of suggestions and recommendations that respondents suggested.

Respondent 1: "There must be regular orientation of the new users and undergraduates."

Respondent 2: "To include all categories of users like B. Tech, M. Tech., M.BA, etc., and other professional courses and a frequent orientation program for them at regular intervals."

Respondent 3: "There needs to be a user awareness program of library resources at various

levels of skills."

Respondent 4: "Various online databases training program is planned."

Respondent 5: "The orientation program should be organized workshop, or seminar."

Respondent 6: "User awareness programs with the audio-visual base."

Respondent 7: "There must be literacy students before submitting assignments."

- **Regular Orientation and User Awareness:** Many respondents emphasized the necessity of regular orientation sessions, particularly for new users and undergraduates and suggest that regular orientation helps familiarize users with library resources, enhancing their confidence and competency in navigating these resources effectively. Incorporating ongoing user awareness programs can ensure students' ability to be continuously updated about library services at various skill levels, addressing diverse user needs.
 - **Targeting Diverse User Groups:** Respondent 2's suggestion to include a wider range of professional courses (like B. Tech, M. Tech, MBA, etc.) in orientation programs reflects an understanding of the diverse educational landscape in HEIs. It is essential to ensure that all categories of students possess IL skills tailored to their specific academic and professional contexts.
 - **Innovative Delivery Methods:** The recommendations for workshops, seminars, and audio-visual training sessions indicate a shift towards more engaging and interactive methods for delivering IL content. It can improve user engagement and retention of information. By employing varied formats, libraries can cater to different learning preferences and improve the overall effectiveness of IL programs.
- Respondent 8:** "Credit-based literacy for new undergraduate programs.
- Respondent 9:** "Integration of Information literacy in the higher educational curriculum."
- Respondent 10:** "Mandatory courses or programs on IL."
- **Integration of Credit Systems and Curricular Changes:** Suggestions regarding the introduction of credit-based literacy programs emphasize the potential to incentivize student participation in IL activities. This system should be aligned with initiatives such as credit scores, which encourage students to earn credits for their engagement in IL,

thus integrating it into their academic learning. Integrating IL into higher education curricula ensures that students not only learn about library resources but also actively use them, fostering a culture of information literacy throughout their studies (University Grants Commission⁴¹; MHRD³⁰).

- **Mandatory IL Courses:** The study reveals that no credit score system in institutions is awarded for participating in information literacy programs. It is imperative that this model of add-on (2/3) credit scores in the academic curriculum may prove to be an important factor in the learning achievements of students. Additionally, it will be an absolute mobilizing factor to visit the library and utilize the library resources provided to get knowledge and spread this knowledge to future generations.
- **Collaboration Between Faculty and Librarians:** The study also indicates a significant gap which is found between faculty and library staff in promoting IL programs. Respondents suggested that collaboration should be there between librarians and faculty which makes them aware of the library activities and resources. Librarians can use faculty as a hand-holding role to motivate. This collaboration can lead to improved learning outcomes and more effective engagement with library services.

Limitations of the Study

There are some limitations of this study. First, it targets only **library professionals**, not library users or students. This choice was intentional to explore how library professionals plan and implement IL programs in real-life scenarios in selected libraries.

The second, the study covers a variety of institutions which have their own diverse, unique approaches, users' needs and educational priorities (such as these institutions are based on management, research-oriented and technology-based institutions). Therefore, it is not feasible to evaluate or compare all institutions on the same scale, as each one is the best and operates effectively in its context.

Conclusion

In light of the findings presented, it is essential to evaluate current practices and promote best practices to maximise the effectiveness of information literacy (IL) programs offered by libraries. The institutions examined in this study hold prestigious statuses, and there is an expectation for them to excel in academic quality, funding, infrastructure, and the calibre of

their staff. If these institutions do not promptly adopt new practices and innovations, the question arises: who will? By addressing these areas—regular orientation, diverse user inclusion, innovative delivery methods, curricular integration, and enhanced faculty-librarian collaboration—institutions can significantly improve the effectiveness of their information literacy programs, ultimately benefiting students' academic success and lifelong learning capabilities. These insights not only add to the existing literature on information literacy but also give implementable recommendations for institutions aiming to enhance their IL initiatives. It is essential to mention that continuous improvement and adaptation are important for preserving the integrity of these institutions, ensuring they remain at the forefront of higher education.

To conclude, the need for ongoing evaluation, adaptation, and a commitment to excellence in information literacy programs is supreme for prestigious institutions. By promoting and fostering a proactive approach to improvement, these institutions can ensure they not only maintain their esteemed status but also significantly contribute to the advancement of higher education in India.

References

- 1 Adhikari H and Joshi Y C, Instruction in information literacy and its function in fostering critical thinking abilities, *Educational Administration: Theory and Practice*, 30(5) (2024) 2454–2459. Available at: <https://kuey.net/>.
- 2 Aharony N and Bronstein J, Academic librarians' perceptions on information literacy: The Israeli perspective, *portal: Libraries and the Academy*, 14(1) (2014)103–119. doi: 10.1353/pla.2014.0001.
- 3 Aharony N, Julien H and Nadel-Kritz N, Survey of information literacy instructional practices in academic libraries, *Journal of Librarianship and Information Science*, 51(1) (2019) 1–8. doi: 10.1177/09610006198917.
- 4 Alexander L and Smith R, Research findings of a library skills instruction web course, *portal, Libraries and the Academy*, 1(3) (2001) 309–328. doi: 10.1353/pla.2001.0033.
- 5 ALA, Final report of the American Library Association Presidential Committee on Information Literacy. Available at: <https://www.ala.org/acrl/publications/whitepapers/presidential> (Accessed: 15 October 2024).
- 6 Anyaoku E N, Librarians' conceptions of information literacy in three federal universities in southeast Nigeria: Implications for effective implementations of information literacy programs, *Library Philosophy and Practice* (2016) 1–16. Available at: <http://digitalcommons.unl.edu/libphilprac/1357>
- 7 Anyaoku E N, Ezeani C N and Osuigwe N E, Information literacy practices of librarians in universities in South East Nigeria, *International Journal of Library and Information Science*, 7(5) (2015) 96–102. doi: 10.5897/IJLIS2014.0489.

- 8 Arenas, L D J, Rodríguez J V, Gómez J A and Arenas M, Information literacy: Implications for Mexican and Spanish university students, *Library Review*, 53(9) (2004) 451–460. <https://doi.org/10.1108/00242530410565238>
- 9 Arya S, Information literacy programmes and practices: A survey of selected higher institutions of Udaipur district, *Global Journal of Academic Librarianship*, 1(1) (2014) 9–18. Available at: <http://www.ripublication.com>.
- 10 ACRL, Information literacy competency standards for higher education. Available at: <http://www.ala.org/acrl/standards/informationliteracycompetency> (Accessed on 15 October 2024).
- 11 Baro E E and Keboh T, Teaching and fostering information literacy programmes: Survey of five university libraries in Africa, *Journal of Academic Librarianship*, 38(5) (2012) 311–315. doi: 10.1016/j.acalib.2012.06.001.
- 12 Baro E E, Seimode F D and Godfrey V, Information literacy programmes in university libraries: A case study, *Libri*, 63(4) (2013) 282–294. doi: 10.1515/libri-2013-0023.
- 13 Bawden D, Information and digital literacies: A review of concepts, *Journal of Documentation*, 57(2) (2001) 218–259. <https://doi.org/10.1108/EUM0000000007083>
- 14 Chevillotte S, Information literacy, in Bates, M J and Maack M N (eds.), *Encyclopedia of Library and Information Sciences*, Vol 3 (CRC Press; United States) 2010, p. 2421–2428.
- 15 Eisenberg M B, Big6 approach to information and technology literacy. The Information School, University of Washington, (2003), Available at <https://www.ischool.washington.edu/mbe> (Accessed on 12 April 2025)
- 16 Harrison S J A and Deans M J O, Methodology used to deliver information literacy instruction by a select group of academic librarians: A case study, *Asian Association of Open Universities Journal*, 16(2) (2021) 177–192. doi: 10.1108/AAOUJ-01-2021-0006.
- 17 Hicks A and Lloyd A, Relegating expertise: Outward and inward positioning of librarians in information literacy education, *Journal of Librarianship and Information Science*, 54(3) (2021) 415–426. <https://doi.org/10.1177/0961006211020104>
- 18 IIM, Available at: https://en.wikipedia.org/wiki/Indian_Institutes_of_Management (Accessed on 15 October 2024).
- 19 IIT, Available at: https://en.wikipedia.org/wiki/Indian_Institutes_of_Technology (Accessed on 15 October 2024).
- 20 IISERs, Available at: https://en.wikipedia.org/wiki/Indian_Institutes_of_Science_Education_and_Research (Accessed on 15 October 2024)
- 21 IFLA, Available at: <https://www.ifla.org/units/information-literacy/> (Accessed on 25 September 2024).
- 22 Karisiddappa C R and Rajgoli I U, In search of information literacy programmes and practices: Survey of selected institutions at Bangalore, *DESIDOC Journal of Library & Information Technology*, 28(2) (2008) 28–38. <https://doi.org/10.14429/djlit.28.2.164>
- 23 Koehler M J and Mishra P, what is technological pedagogical content knowledge, *Contemporary Issues in Technology and Teacher Education*, 9(1) (2009) 60–70.
- 24 Lloyd A, Information literacy: The meta-competence of the knowledge economy, *Journal of Librarianship and Information Science*, 37(4) (2005) 85–90. <https://doi.org/10.1177/0961000605058665>
- 25 Lwehabura J M and Stilwell C, Information literacy in Tanzanian universities: Challenges and potential opportunities, *Journal of Librarianship and Information Science*, 40(3) (2008) 179–191. <https://doi.org/10.1177/0961000608092553>
- 26 Madhusudan M, Information literacy programmes in select university libraries in Delhi: A study, *Journal of Indian Library Association*, 48(4) (2012) 10–24.
- 27 Mariyan S and Naveen E, Information Literacy Skills in the Digital Era: Navigating the Information Landscape, *International Journal of Advanced Scientific Multidisciplinary Research*, 1(1) (2024) 19–22. <https://globalarchives.in/index.php/ijasmr/article/view/4>
- 28 McBride M F, Reconsidering information literacy in the 21st century: Redesign of an information literacy class, *Educational Technology Systems*, 40 (3) (2012) 287–300. <https://doi.org/10.2190/ET.40.3.e>
- 29 Meena J, Information literacy instruction methods for diverse learners, *ShodhKosh: Journal of Visual and Performing Arts*, 5(3) (2024) 472–479. <https://doi.org/10.29121/shodhkosh.v5.i3.2024.2198>
- 30 MHRD, Available at: https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf (Accessed on 15 October 2024)
- 31 Mishra C, Faculty perceptions of digital information literacy at an Indian university: An exploratory study, *New Review of Academic Librarianship*, (2018). <https://doi.org/10.1080/13614533.2018.1517102>
- 32 Morris D, Review of information literacy programmes in higher education: The effects of face-to-face, online, and blended formats on student perception, *Journal of Information Literacy*, 14(1) (2020) 19–40. <https://doi.org/10.11645/14.1.2668>
- 33 Omar A M, Haji H A and Mwitumbe K H, Information literacy in Zanzibar universities: Current situation and the way forward, *International Federation of Library Associations and Institutions*, 40(4) (2014) 280–288. <https://doi.org/10.1177/0340035214544882>
- 34 Pattar V, Barriers for effective implementation of information literacy programmes at engineering college libraries: A case study, *International Journal of Library Science*, 6(2) (2012). Available at: <https://www.researchgate.net/publication/341433151>
- 35 Pattar V D and Hadagali G S, Fostering information literacy programmes in engineering college libraries: A study of Mumbai region, *Journal of Indian Library Association*, 57(4) (2021) 91.
- 36 Rajaram S, Information literacy gap: Challenges in bridging the divide. In *Proceedings of the 4th International Convention INFLIBNET Centre*, Gulbarga, 2–4 February 2006, p.1–9. Available at: <https://ir.inflibnet.ac.in:8443/ir/bitstream/1944/564/1/21%28cal%2006%29.pdf>
- 37 Ranganatha B, Joteshna D and Mahadevan B, Utilization of information literacy skills of the faculty members in affiliated colleges of Tumkur University in Karnataka, *Educational Administration: Theory and Practice*, 30(1) (2024) 1729–1734. Available at: <https://kuey.net/>
- 38 Shields M, *Research methodology and statistical methods*, (ED-Tech Press; United Kingdom), 2019, p.1-288
- 39 Shire W and McKinney P, Web 2.0 tools and information literacy instruction in UK university libraries: Hype or

- reality, *Journal of Information Literacy*, 15(2) (2021)124–149. <https://doi.org/10.11645/15.2.2821>
- 40 Singh N, Embedded information literacy for engaging students in higher education: An assessment of Indian agricultural universities and trends, *World Libraries Journal*, 23(1) (2019). Available at: <https://worldlibraries.dom.edu/index.php/worldlib/article/view/578>
- 41 UGC, Available at: <https://www.ugc.ac.in> (Accessed on 15 October 2024)
- 42 Vijesh P V and Ganeshan P, Assessment of information organization and services competencies among business school librarians in Kerala State, India, *Journal of Indian Library Association*, 59(4) (2023).
- 43 Vinent F I J, Exploring science information literacy instruction at French and Spanish libraries, *Science & Technology Libraries*, 34 (2015) 134–146. <https://doi.org/10.1080/0194262X.2015.1048038>
- 44 Wema E, Developing information literacy courses for students through virtual learning environments in Tanzania: Prospects and challenges, *International Federation of Library Associations and Institutions*, (2021)1–11. <https://doi.org/10.1177/03400352211018231>
- 45 Yearwood S, Foasberg N and Rosenberg K, Survey of librarian perceptions of information literacy techniques. *Communications in InformationLiteracy*, 9(2) (2015). Available at: <http://pdxscholar.library.pdx.edu/comminfolit/vol9/iss2/3>
- 46 Zou N, Educause: A shared resource for information literacy. *International Federation of Library Associations and Institutions*. Available at: <https://www.ifla.org/news/educause-a-shared-resource-for-information-literacy/> (Accessed on 15 Oct 2024).