

Emerging Trends in Libraries of Design Institutes: A Case Study

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Libraries have a long history of providing access, information services and preserving resources either independently or in collaboration. Emerging technological trends support innovative services as per the users' requirements. Hence, an effort is made to conduct a pilot study to map the 'Trends' that were identified and organized into seven categories: Society, Technology, Education, the Environment, Politics (and Government), Economics, and Demographics (STEEPED) by the Library of the Future an initiative of American Library Association with a few selected Libraries of Design institutes in United States of America, Canada and Mexico to understand the confluence of emerging trends with innovative services, for creating equal opportunities and providing more inclusive spaces and services to the patrons.

Introduction

Emerging trends evolve based on technology but implementing emerging trends in the libraries is based on the vision, strategy, patrons, and processes. Sandhu (2018) opined that the academic libraries have expertise and mindset of being early adopters of new technologies to perform various activities and hence the role of academic libraries in digital transformation of universities become central. Library of the Future (Centre for the Future of Libraries) is an initiative of American Library Association (ALA) that identified trends to libraries and librarians. Initially they identified six categories: Demographics, Economics, Government, Environment, Society, and Technology (DEGEST). Later, they added Education to make it STEEPED- Society, Technology, Education, Environment, Politics & Government, Economics, and Demographics that have prominence to libraries. Based on which total forty-two emerging trends were forecasted following colour codes matching categories and trends (<https://www.ala.org/tools/future/trends/>).

Hence, the present paper is a pilot study that concentrates on analysing the emerging trends adopted by Libraries of design institutes as the authors are affiliated with one of the most prominent Design institutes in India, National Institute of Design (NID), Ahmedabad, and felt it is important to them to understand the latest trends in using these applications in libraries. NID has taken six decades of pioneering hard work by the academic community at the institute to develop a system of design education which lays more emphasis on learning than on mere instruction. Over a span of 60 years, the institution has made it a point to



Figure 1: STEEPED Seven Categories of Trends



Figure 2: Forty-two Emerging Trends with reference to STEEPED

emphasize on learning and to pursue innovation led designs through the development of the mind and skills of designers (<https://www.nid.edu/about/mandates>). For the present study, fourteen institutes/universities in Canada, United States of America (USA), and Mexico that have signed Memorandum of Understanding (MoU) with NID, Ahmedabad have been considered (<https://www.nid.edu/academics/international-programmes>) as per the details provided in the appendix.

2. Objectives

Based on these points the objectives emerged for this study are:

- ❖ To understand the application of emerging trends with reference to facilities, services, and spaces.
- ❖ To know the important emerging trends implemented by the libraries of Design and Art institutes and universities and map them with the emerging trends reported as per STEEPED.

3. Literature Review

Based on the objectives of the study, literature was reviewed on emerging trends, technologies, services, and spaces that emerged into libraries in past few years.

Upadhyaya (2015) after reviewing the emerging trends and changes taking place in the libraries felt that librarians have to think and carefully watch the trends in higher education, ICT, Information seeking behaviour of users and the social media, so that they may take judicious and economical decision in the front of resources and technology which is the most vital part of the library system.

ACRL Research Planning and Review Committee 2021-22 tried to summarize trending topics in academic librarianship from the past two years, including a global pandemic. The summary was based on the below mentioned points:

- ❖ **Space utilization** with reference to wide variety of space types with different acoustical, privacy, and technology needs according to the work undertaken.
- ❖ **Collaborative collection and growth of shared print** – ‘Controlled Digital Lending’ is an emerging trend where libraries “circulate temporary digital copies of print books they own in a one-to-one ratio of ‘loaned to owned,’ removing the print copy from circulation while the digital copy is in use.
- ❖ **Open Access** with reference to ‘transformative agreements’ that facilitate open access publishing by their authors and allow authors to maintain copyrights. And opined that Open Access continues to be a focal point for academic libraries and administration.
- ❖ **Artificial Intelligence (AI)** is being increasingly embedded in academic libraries tools and services with reference to Virtual Reference Services (Chatbots), descriptive cataloguing, grouping articles etc., while Ex Libris survey revealed that while nearly 8 percent of research libraries are exploring the use of AI and machine learning, only about 5 percent are currently leveraging the technology.
- ❖ **Data** in the gaining prominence of providing data services, the libraries are looking back in time to draw conclusions and offer suggestions to advance the field and the libraries role.
- ❖ **Critical Librarianship** – Critical approach to librarianship and information literacy will likely continue to be an area of exploration for LIS scholars.

Kotlay (2016) performed literature review to understand the role of academic libraries with reference to research related services and found that there is a need to provide Information Literacy Education mainly the Research Data Services (RDS) in the form of data literacy addressing data quality and citation.

Shat et al (2020) assessed emerging data environment concerning recent advancements in data science, data management and progress in duties of librarians, presentation of detailed data, the function of data libraries as well as librarians concerning data users. They opined that it is supposed to be an exciting era to work in a library as its role is expanding with specific new challenges and it is important to educate librarians, library science researchers, and students regarding understanding, utility, and management of data to meet the requirements of data science librarians.

Christides et al (2016) described how a blockchain-IoT combination facilitates the sharing of services and resources and opined that the blockchain-IoT combination is powerful and can cause significant transformation across several industries.

Otike and Barat (2021) reviewed literature on emerging trends in academic libraries and opined through the emerging trends in Kenyan academic libraries have been slow, for proper utilisation of various advanced technology, it is imperative for academic libraries to consider integrating technological system into conventional information resources and services.

Turner et al (2013) examined scholarly literature that discussed development of information learning commons and learning spaces in academic libraries and suggested the by acknowledging distinctive historical factors, purposes, pedagogical influences, and attributes, appreciate the significance of emerging trends in academic libraries and their spaces.

With the literature reviewed it is evident that emerging technologies are inherently embraced by libraries either immediately or gradually based on their infrastructural or users' requirements. Hence, in the present study the authors tried to understand about the influence of emerging trends in the libraries of Design institutes and universities.

4. Research Methodology

The study is based on content analysis that is used for a qualitative approach, where conclusions can be drawn by carefully analysing various ways of communication and written words. For this study, the list of the MoU institutes/universities had been collected from the National Institute of Design, Ahmedabad website as mentioned under the list of international collaborations (<https://www.nid.edu/academics/international-programmes>). The institutes/ universities websites and library home pages were visited between 10th October 2021 to 28th February 2022 when most of the institutes were following Covid 19 protocols and the websites were functional and searched to note the details with reference to the following topics:

- ❖ Facilities resources, and services provided by the libraries
- ❖ User Education programmes

- ❖ Research Support Services
- ❖ Infra structure and
- ❖ Archival services

Data related to various other connecting points with the searched topics were noted and the interpretation is presented below.

5. Data Analysis and Interpretation

Data from fourteen Design institutes/universities from Canada, USA, and Mexico countries out of which for one institute in Mexico, the authors were unable to find the details of the library. Hence total thirteen libraries were considered for this pilot study.

5.1. Facilities Resources, and Services Provided by the Libraries

Out of thirteen libraries, all libraries are providing OPAC services, Circulatory services, Remote access service, Course & Material reserves, Inter Library Loans, Library guides, Subject/Resource guides, Student guide textbooks, and Open and affordable course contents/Open Education Resources. Twelve libraries are providing film and image services, Eleven libraries are providing audio-visual materials, Eight libraries are providing access to e-theses, Affordability support and Ask a Librarian services, Six libraries are providing Digital commons Service (for example, Digital Commons@Georgia Southern is an open-access digital repository that collects, archives, and disseminates the intellectual and creative output of the University's faculty, staff, students, and community partners. Digital Commons hosts contributions from across the campus and the community, including campus documents and publications, faculty and student research, conferences, journals, research data, news, and more). Five libraries are providing Frequently Asked Questions (FAQs) on their websites, two libraries are providing Discovery services and Alternate forms of Information (this is the service provided to the users with disabilities with their preferred format upon request and Archives, rare books, and special collections materials are exempted from this service). Only one library is providing the board games facility.

Table 1: Facilities, Resources and Services Provided by the Libraries

Standing	Facilities, Resources and Services	No. of Libraries
1	Lending/Borrowing/Circulatory services	13
2	Remote access service/Accessibility support for e-resources	13
3	Course reserves	13
4	Materials reserves	13
5	Alternative forms of information	2
6	Inter Library Loans	13
7	Discovery services	2

8	Library guides	13
9	Subject/resource guides	13
10	Materials search/Catalogues (OPAC)	13
11	Audio-Visual materials	11
12	Student guide textbooks	13
13	Affordability support	8
14	Open and affordable course contents/OERs	13
15	Film and image services	12
16	Digital commons	6
17	E-theses	8
18	Board games	1
19	Ask a Librarian service	8
20	FAQs	5

5.2. User Education Programmes

Librarians are offering several types of classes which highlight the libraries' print and electronic resources. Access in-person or online help with conducting research or with using library resources or schedule in-class library instruction tailored to class assignments or to specific library resources are being offered by all thirteen libraries while twelve libraries are offering Library tours and campus tours even in virtual mode.

Table 2: User Education Programmes

Standing	User Education Programmes	No. of Libraries
1	Library instruction	13
2	Reference and instruction	13
3	Scheduled instruction	13
4	Online consultation	13
5	Library tours	12

5.3. Research Support Services

Almost all libraries are providing research support services. But specifically, thirteen libraries are providing instructional support for research skills, data services/analytics/research data management services, research, and citation help, providing awareness about the reference managers like Zotero, Mendeley and Endnotes, Research guides, Copyright guidance. Twelve libraries are providing research by appointment (one-on-one or small group appointments with librarians are available for in-depth research assistance for all faculty, students, and staff. Appointments can be face-to-face or virtually via Zoom) and citation search/research metrics service. Eleven libraries are providing literature and systemic reviews while eight libraries are providing about the details of academic integrity.

Table 3: Research Support Skills

Standing	Research Support Service	No. of Libraries
1	Instructional support for research skills	13
2	Academic integrity	8
3	Data services/Analytics/Research Data Management Service	13
4	Research and citation help	13
5	Reference managers like Zotero, Mendeley and endnotes	13
6	Research guides	13
7	Copyright guidance	13
8	Research by appointment	12
9	Literature and Systemic reviews	11
10	Citation search/Research metrics services	12

5.4. Infrastructure

It was noted the trends in infrastructure are more or less similar to the current trends in libraries. Thirteen libraries are providing computer workstations, study carrels/individual study spaces. Twelve libraries are providing group study/discussion rooms and Material library. Eleven libraries are providing presentation spaces and digital labs (production rooms). Ten libraries are providing Audio-Visual booths and Archives. Six libraries are providing infrastructure facility for people with disabilities while two libraries are providing re-use depots (The Re-Use Depot is an important and great opportunity for artists and designers to up-cycle, re-purpose or reuse materials that can inspire, explore creativity, or reduce students financial burden while redirecting the material from landfill. It's a location for donating used but usable art & design materials and/or finding used items that will be useful to your creative practice).

Table 4: Infrastructure

Standing	Infrastructure	No. of Libraries
1	Group study/Discussion rooms	12
2	Re-use Depots	2
3	People with disability	6
4	Presentation spaces	11
5	AV booths	10
6	Computer workstations	13
7	Material Library	12
8	Archives	10
9	Digital labs (production rooms)	11
10	Study carrels/ Individual study spaces	13

5.5. Archival Services

As a unique feature of libraries of Design institutes, the archival services are included in the libraries though the archives use different software to catalogue and provide services to the users.

Out of thirteen libraries only eight libraries were noted to have archives that provide image services, image library collection database and moving image preservation. Five archives provide space for installing exhibitions while four archives provide cultural heritage online service.

Table 5: Archival Services

Standing	Archival Services	No. of Libraries
1	Image services	8
2	Image library collection database	8
3	Cultural heritage online service	4
4	Exhibitions	5
5	Moving image preservation	8

6. Limitations

This study is completely based on the publicly available data collected from the websites of the respective libraries or institutes/universities regarding the implementation of emerging trends to provide innovative services.

7. Discussion

In this pilot study the authors tried to understand about the resources, services, infrastructure provided by the selected libraries from the Design institutes in USA, Canada, and Mexico. institutes/universities.

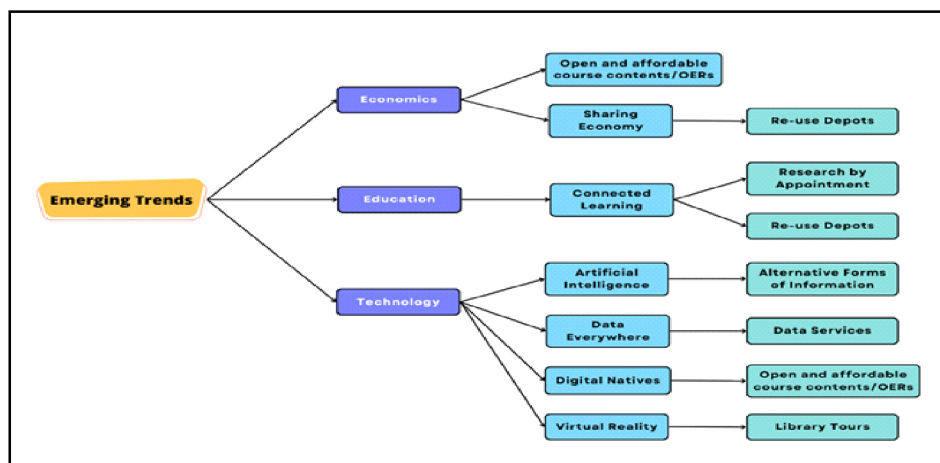


Figure 3: Mapping of Emerging Trends (STEEPED)

They found that Research support services, providing alternative formats of information, affordability support, reuse depots, infrastructure, and services to people with disabilities and archival services to be innovative and can be implemented in Indian libraries of Design/Art. The libraries have embraced three categories-Economics, Education and Technology and with the emerging trends like Artificial Intelligence (AI), Connected learning, Data everywhere, Digital natives, Open Education Resources, Sharing economy, and Virtual Reality with their initiatives like reuse depots, research by appointment, alternate formats of information, data services and virtual library tours.

8. Conclusion

As per the pilot study it is evident that though there are many emerging trends evolving into the world, the libraries are steadily implementing them as per the users' information needs and requirements. It is heartening to note that the libraries are trying to provide equal opportunities to all. Whether emerging trends or innovative services, 'users' are the focal points for libraries and the information literacy will likely continue to be an area of exploration and an important approach to librarianship.

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