

SYNERGY FOR INSIGHT: LIBRARIES AS INTERDISCIPLINARY HUBS FOR SOCIAL SCIENCES RESEARCH IN THE DIGITAL AGE

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Abstract :

The rapid transformation of higher education and scholarly communication in the digital age has significantly altered the nature of social sciences research. Contemporary research increasingly crosses conventional disciplinary boundaries and requires access to a wide range of scholarly and non-traditional information resources, including books, journals, research datasets, government publications, digital archives, institutional repositories, bibliometric resources, open-access literature, digital humanities platforms and artificial intelligence (AI)-enabled discovery tools. In this environment, the academic library can no longer function primarily as a repository of documents. It must evolve into an active research-support environment that brings together researchers, information resources, data, technologies, professional expertise and collaborative networks. The National Education Policy (NEP) 2020 provides an important policy context for this transformation by promoting multidisciplinary education, interdisciplinary research, technology-enabled learning, research and innovation, and stronger academic collaboration. This paper examines how academic libraries can contribute to interdisciplinary social sciences research by developing research-oriented services and competencies. It explores the emerging role of the librarian as research partner, information specialist, research-data steward, digital scholarship facilitator, AI-literacy educator, scholarly communication advisor and institutional connector. The paper proposes an Interdisciplinary Library Research Support Framework (ILRSF) based on six interconnected dimensions: discovery, research data, digital scholarship, artificial intelligence, scholarly communication and collaboration. It also considers challenges such as information overload, digital inequality, AI-generated inaccuracies, copyright, privacy, ethical concerns, algorithmic bias, predatory publishing and skill gaps. Finally, the paper presents an action-oriented approach through which academic libraries can develop into collaborative knowledge infrastructures capable of supporting evidence-based social science research and the broader objectives of NEP 2020.

Keywords : Academic Libraries, Interdisciplinary Research, Social Sciences, NEP 2020, Digital Scholarship, Artificial Intelligence, Research Data Management, Research Support Services, Digital Humanities, Information Literacy.

Introduction :



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NATIONAL CONFERENCE ON SYNERGY INSIGHT : LIBRARIES AS INTERDISCIPLINARY HUBS
FOR SOCIAL SCIENCES RESEARCH IN THE DIGITAL AGE

The twenty-first century has witnessed an extraordinary expansion in the creation, availability and use of scholarly information. At the same time, the boundaries between academic disciplines have become increasingly fluid. Subjects such as economics, sociology, political science, psychology, education, history, geography, public administration and information science frequently intersect when researchers attempt to understand complex social phenomena. Many of the major challenges confronting contemporary society are inherently interdisciplinary. Climate change, migration, public health, artificial intelligence, unemployment, inequality, misinformation, urbanisation, digital exclusion and sustainable development cannot be adequately examined through the lens of a single discipline. Understanding such issues requires the integration of different theoretical perspectives, research methods, datasets and forms of evidence. This changing research environment has consequently altered the information requirements of social scientists. Researchers need more than conventional books and scholarly journals. They may require census information, government statistics, policy documents, historical records, digital archives, institutional publications, multimedia materials, research datasets, geographical information and computational tools. The academic library is therefore presented with an important opportunity to move beyond a collection-centred model and become a research-partnership environment.

The central question for the contemporary academic library is no longer simply where a particular document can be found. Increasingly, researchers need assistance in discovering relevant information, evaluating its reliability, connecting information from different disciplines, managing research data, using emerging technologies responsibly and communicating research findings effectively. In this sense, the library can become an institutional platform through which information, people, technology and expertise converge to support knowledge creation.

NEP 2020 and the Transformation of Higher Education :

The National Education Policy 2020 places considerable emphasis on multidisciplinary and holistic higher education. It seeks to reduce excessive fragmentation within higher education and encourages institutions to promote collaboration across academic disciplines. The policy also recognises the importance of research and innovation across areas including the humanities and social sciences. The subsequent emphasis on multidisciplinary higher education institutions and Research and Development Cells further strengthens the institutional environment for interdisciplinary research. Such developments have implications not only for academic departments but also for the information infrastructure that supports them.

A multidisciplinary institution requires an information environment that is equally capable of crossing disciplinary boundaries. If researchers from different departments collaborate on common research questions, library collections and services should not remain isolated within departmental structures. Discovery systems, databases, datasets, digital resources, research-support services and professional expertise need to be integrated in ways



that reflect the interdisciplinary nature of contemporary scholarship. The implementation of NEP 2020 therefore provides academic libraries with an opportunity to redefine their institutional role. Instead of being viewed primarily as support units responsible for collections and circulation, libraries can be recognised as essential components of the research infrastructure of higher education institutions.

From Repository to Research Partner :

The traditional academic library has historically focused on collection development, classification, cataloguing, circulation, reference services, periodical management, preservation and user education. These activities continue to form the foundation of professional library services. However, the digital research environment requires additional forms of support. Researchers increasingly need assistance with literature searching, systematic searching, citation analysis, bibliometrics, research-data management, digital scholarship, institutional repositories, open-access publishing, researcher profiles, research visibility and responsible use of artificial intelligence. They may also require guidance on copyright, research ethics, data privacy, scholarly communication and the identification of reliable sources. The librarian can consequently become an active participant in the research process. Rather than interacting with researchers only when a specific document is required, the librarian can provide assistance across the research lifecycle. This involves understanding the researcher's information problem, identifying appropriate resources, developing search strategies, evaluating evidence, organising information, supporting data management and helping researchers disseminate and preserve their scholarly outputs. Such a transformation does not diminish traditional librarianship. Instead, it extends established professional competencies into the digital research environment. The librarian's expertise in information organisation, metadata, discovery, evaluation and access provides a strong foundation for new research-support responsibilities.

Academic Libraries as Interdisciplinary Research Hubs :

An interdisciplinary research hub can be understood as an environment where researchers from different fields interact with information resources, technologies and professional expertise to generate new knowledge. Academic libraries are particularly well positioned to fulfil this function because they serve researchers and students across the institution. The library can connect faculty, researchers, students, scholarly literature, datasets, digital technologies, research tools and professional expertise. This connecting function is particularly valuable when research questions extend beyond the boundaries of individual departments. Consider a study on urban poverty. Such research may involve sociology, economics, geography, political science, public administration, psychology, statistics and information science. A library supporting such a project could bring together scholarly literature, census information, government reports, statistical databases, newspaper archives, GIS resources, institutional publications and relevant datasets. The library therefore becomes more than a location where information is stored; it becomes an infrastructure through which knowledge from different disciplines can be discovered, connected and used.



The interdisciplinary library should consequently encourage interaction among academic communities. Research consultations, thematic resource guides, workshops, collaborative projects and research-support programmes can create opportunities for researchers to discover resources and expertise outside their immediate disciplinary environments.

The Librarian as a Research Co-Pilot :

An important emerging concept is the librarian as a **research co-pilot**. In this role, the librarian does not conduct research on behalf of the researcher but provides specialised information expertise throughout the research process. At the beginning of a project, the librarian can assist in identifying appropriate databases, developing search strategies, locating foundational literature, conducting citation searches, identifying alternative terminology and mapping the existing literature. This is especially valuable in interdisciplinary research, where the same concept may be described differently across different academic fields. During the research process, library support can extend to research-data management, reference management, metadata creation, systematic searching, digital archives, statistical resources, copyright awareness and responsible information use. The librarian can also facilitate communication between researchers and institutional IT or technical specialists when specialised research technologies are required. After the research has been completed, libraries can contribute through institutional repositories, researcher identifiers such as ORCID, research-profile development, open-access publishing, citation monitoring, research-impact assessment and digital preservation. Such services can improve the discoverability, accessibility and long-term value of scholarly outputs. The research co-pilot model therefore establishes a continuous relationship between the library and the research community rather than limiting library interaction to individual transactions.

Interdisciplinary Collection Development :

Collection development has traditionally been organised around academic subjects and departmental requirements. Although disciplinary collections remain essential, contemporary research requires libraries to supplement this approach with thematic and problem-oriented resource development. A library can develop thematic information environments around subjects such as gender and society, climate change and society, artificial intelligence and society, migration, public health, sustainable development, rural development, urban studies, education and technology, social justice and digital democracy. Thematic collection development is particularly useful for emerging research areas that do not correspond neatly with traditional subject boundaries. It also enables librarians to identify connections among resources held in different subject areas and to create integrated research guides for interdisciplinary themes. In this approach, collection development becomes more responsive to research problems rather than being determined solely by departmental structures.

Integrated Discovery and Semantic Search :

The enormous growth of scholarly information has made discovery increasingly



complex. Researchers may encounter thousands of potentially relevant records, while terminology varies considerably between disciplines. A search conducted using only one set of keywords may therefore overlook valuable literature described using alternative terminology.

Semantic and AI-supported discovery systems offer opportunities to address this problem by identifying conceptual relationships among related terms. For example, research on the social consequences of digital exclusion may involve literature concerning the digital divide, digital literacy, internet inequality, socioeconomic disparities, information poverty, technology access and digital citizenship. Technology can assist researchers in identifying these conceptual connections and exploring literature beyond the exact terminology used in an initial search. However, automated discovery should not be regarded as a substitute for professional information evaluation. Search results generated or ranked by algorithms require human assessment for relevance, authority, accuracy, methodological quality and scholarly credibility.

The librarian therefore has an important role in helping researchers understand both the capabilities and limitations of AI-supported discovery systems.

Artificial Intelligence and the Academic Library :

Artificial intelligence is rapidly becoming part of the scholarly research environment. AI-based tools can support natural-language searching, literature discovery, summarisation, translation, concept mapping, classification, metadata creation, data analysis and research brainstorming.

These capabilities can improve research efficiency, but they also introduce significant risks. AI systems may generate inaccurate statements, fabricate references, reproduce biases, provide insufficiently transparent results or process information in ways that create privacy and intellectual-property concerns. Researchers may also become overly dependent on commercial AI platforms or unintentionally provide confidential research material to external systems.

Academic libraries therefore have a major responsibility to develop AI literacy among researchers and students. AI literacy should not be limited to teaching users how to operate AI tools. It should include understanding how such systems work at a basic level, how to formulate effective prompts, how to verify AI-generated claims and references, how to recognise bias and fabricated information, how to protect confidential information and when AI should not be used. A useful principle for academic libraries is that researchers should learn how to use AI, how to verify AI and when not to use AI. Human judgment, scholarly ethics and source verification must remain central to responsible research.

Research Data Management :

Data has become an increasingly important component of social sciences research.



Researchers may work with census records, surveys, economic indicators, government datasets, demographic information, election data, social-media datasets, institutional records, geographic information and historical datasets. Academic libraries can contribute to the complete research-data lifecycle. Research Data Management services can include data discovery, documentation, organisation, metadata creation, storage, preservation, sharing, citation and ethical management. Librarians can work with researchers and institutional IT teams to develop appropriate practices for naming, organising, documenting and preserving datasets. They can also assist researchers in identifying suitable repositories and understanding requirements relating to data citation and responsible sharing. Good research-data management improves the discoverability, reliability, reproducibility and long-term value of research. It also supports responsible stewardship of institutional and publicly funded research data.

Digital Humanities and Computational Social Science :

Digital Humanities provides another important area in which libraries can support interdisciplinary scholarship. Projects involving digitised manuscripts, oral histories, historical newspapers, text mining, digital archives, mapping, data visualisation, network analysis and computational textual analysis require collaboration among librarians, historians, social scientists, technologists and data specialists. For example, a historical study of political discourse could combine digitised newspapers, optical character recognition, text-mining techniques and geographical mapping to examine changes in language and public debate over an extended period. Libraries can support such projects through digitisation facilities, metadata expertise, digital collections, preservation services and connections with technical specialists. In doing so, the library becomes an institutional meeting point where traditional humanities scholarship can interact with computational methods. The same principle can be extended to computational social science, where large datasets and digital methods are used to investigate social behaviour, communication patterns, demographic change and other complex phenomena.

Scholarly Communication and Open Science :

The academic library's role increasingly extends into scholarly communication. Libraries can assist researchers with institutional repositories, open-access publishing, researcher identifiers, copyright, licensing, research profiles, data repositories, preprints and open educational resources. Open science promotes wider access to research knowledge and encourages greater transparency in scholarly processes. Libraries are well positioned to help researchers understand different publishing models and the implications of copyright and licensing decisions. Institutional repositories are particularly important because they provide a mechanism for preserving and disseminating an institution's intellectual output. By supporting repository deposits and researcher profiles, libraries can improve the visibility and accessibility of institutional research. The library can consequently serve as an institutional centre for responsible scholarly communication, helping researchers move from publication to wider dissemination and long-term preservation.



From Information Literacy to Research Intelligence :

Information literacy has traditionally focused on helping users locate, evaluate and use information. The contemporary research environment requires a broader and more integrated set of competencies that may be described as research intelligence. Research intelligence includes the ability to formulate effective search strategies, evaluate information critically, identify misinformation, understand scholarly publishing, locate trustworthy datasets, use AI responsibly, manage references, recognise questionable publishing practices, protect research data and communicate research findings effectively. Academic libraries can transform conventional user-education programmes into research-intelligence programmes designed for students, faculty and early-career researchers. Such programmes could combine database searching, literature evaluation, reference management, research-data practices, bibliometrics, AI literacy, scholarly communication and research ethics. This transformation would enable libraries to make a direct contribution to research quality rather than merely facilitating access to information.

The Interdisciplinary Library Research Support Framework :

This paper proposes an Interdisciplinary Library Research Support Framework (ILRSF) consisting of six interconnected dimensions.

The first dimension is Discovery. Libraries should provide integrated access to books, journals, databases, theses, reports, datasets, government publications and digital archives. Discovery services should increasingly support cross-disciplinary searching and contextual exploration.

The second dimension is Research Data. Libraries should provide assistance with data discovery, organisation, documentation, metadata, preservation, citation and responsible sharing.

The third dimension is Digital Scholarship. Libraries should support digitisation, digital humanities, text mining, mapping, data visualisation and other computational research methods.

The fourth dimension is Artificial Intelligence. Libraries should provide AI-literacy programmes, guidance on responsible AI use, verification practices and AI-assisted discovery services.

The fifth dimension is Scholarly Communication. Libraries should support open access, institutional repositories, copyright awareness, publishing guidance, researcher identifiers and research visibility.

The sixth dimension is Collaboration. Libraries should actively connect researchers, students, departments, technical experts and external organisations to encourage interdisciplinary research networks. These six dimensions are mutually reinforcing.



Discovery identifies knowledge; data provides evidence; digital scholarship enables analysis; AI can assist exploration; scholarly communication disseminates results; and collaboration connects the people and expertise required to create new knowledge.

The Library Research Support Desk :

The ILRSF can be implemented through a Library Research Support Desk. The desk may provide specialised assistance in literature searching, systematic searching, research-data management, bibliometric analysis, citation management, AI research support, scholarly communication, digital humanities and research visibility. Training can be offered on reference-management applications such as Zotero and Mendeley, as well as researcher identifiers, institutional repositories and academic profiles. Workshops can also address literature-search strategies, research impact, open-access publishing, data management and responsible AI use. The establishment of such a service does not necessarily require the creation of a completely new organisational unit. Existing library professionals can progressively acquire specialised competencies and integrate research-support activities into their current responsibilities. Collaboration with faculty members, IT professionals, research offices and external experts can further strengthen the service.

Building an Institutional Research Ecosystem :

The library's contribution can be visualised as a continuous research ecosystem. The process begins with the library's information resources and professional expertise and extends towards faculty and researchers, interdisciplinary research groups, data resources, digital technologies and research tools. The resulting research outputs can then be preserved through institutional repositories and disseminated through appropriate scholarly communication channels. Increased discoverability can subsequently improve research visibility and create opportunities for further collaboration. In this model, the library becomes a connecting infrastructure rather than an isolated service unit. It facilitates movement between information discovery, research activity, scholarly output and knowledge dissemination.

Challenges and Risks :

The transformation of academic libraries into interdisciplinary research hubs is accompanied by several challenges. The first is the professional skill gap. Librarians need continuous development in areas such as artificial intelligence, data science, bibliometrics, digital humanities, research software and scholarly communication. Financial constraints may also limit the acquisition of specialised databases, AI platforms, digital repositories and research technologies. Institutions therefore need to establish priorities based on researcher requirements and explore sustainable and open-source alternatives where appropriate. Copyright and intellectual-property issues become increasingly complicated when libraries undertake digitisation, text mining and AI-assisted research. Clear institutional policies and professional guidance are necessary to ensure that research activities remain legally and ethically responsible. Data privacy is another significant concern, particularly when research



involves personal, institutional or socially sensitive information. Libraries should promote responsible data handling and work with institutional authorities to develop appropriate data-governance practices. The reliability of AI-generated information presents a further challenge. Researchers need to understand that AI-generated text or references cannot automatically be treated as authoritative evidence. Independent verification remains essential. Digital inequality must also be considered. Access to devices, connectivity, licensed resources and digital competencies is not equally distributed among all students and researchers. The library must therefore continue its traditional commitment to equitable access while expanding digital services. Predatory publishing represents another challenge. Researchers need assistance in assessing journals and publishers, understanding publication practices and recognising deceptive or questionable scholarly communication models.

A Phased Action Plan :

Academic libraries can develop interdisciplinary research services gradually rather than attempting to implement every service simultaneously. The initial phase should focus on establishing the foundation. Libraries can assess existing digital resources, identify researcher requirements, review staff competencies, create research-support webpages and initiate professional-development programmes. The second phase can introduce structured research services. These may include individual research consultations, research-data assistance, bibliometric support, institutional repository services and specialised workshops.

The third phase can introduce advanced services such as AI research support, digital scholarship facilities, data visualisation assistance and interdisciplinary research-networking activities. The final phase should integrate the library formally into the institution's research ecosystem. Library professionals can participate in Research and Development Cells, research committees, research-training programmes, faculty-development activities and interdisciplinary research initiatives. A phased approach enables institutions to match the development of library services with available financial, technological and human resources.

Measuring Research Impact :

Traditional library performance indicators such as the number of books purchased, circulation transactions and physical visits remain useful for operational assessment, but they do not fully demonstrate the library's contribution to research. A research-oriented library should also consider indicators such as the number of research consultations, researchers trained, interdisciplinary projects supported, datasets assisted, repository deposits, open-access outputs facilitated, bibliometric consultations, AI-literacy programmes and research workshops conducted. Researcher satisfaction and evidence of collaboration should also be considered. Over time, libraries can examine whether their services contribute to improved research visibility, stronger interdisciplinary collaboration, better information practices and greater use of institutional research resources.

Such assessment represents a shift from measuring library activity to demonstrating



library contribution to research outcomes.

Vision for the Academic Library in 2030 :

By 2030, the successful academic library should function simultaneously as a Knowledge Hub, Data Hub, Digital Scholarship Hub, AI-Literacy Hub and Collaboration Hub. The librarian of the future will require a combination of information expertise, technological competence, research awareness, communication skills and ethical judgment. Technology is unlikely to eliminate the professional role of librarians. Instead, the growing complexity of digital information environments may increase the need for professionals capable of helping researchers distinguish reliable knowledge from unreliable or misleading information. The future academic librarian should therefore be understood as a knowledge professional who can connect researchers with information, data, technologies, expertise and collaborative opportunities. The value of the profession will increasingly lie not only in managing collections but also in facilitating responsible knowledge creation.

Conclusion :

The transformation of higher education towards multidisciplinary and interdisciplinary learning presents academic libraries with a significant opportunity to redefine their institutional contribution. Social sciences researchers increasingly require integrated access to literature, data, technology, expertise and collaborative networks. Because libraries interact with almost every academic discipline within an institution, they are uniquely positioned to provide this integration. The academic library must consequently evolve from a repository into research infrastructure, from a service provider into a research partner, from departmental support into interdisciplinary support, from information literacy into research intelligence, and from conventional searching into AI-assisted but human-verified discovery. The growing emphasis on multidisciplinary education and research under NEP 2020 makes this transformation particularly relevant in the Indian higher education environment. Libraries that develop research-data services, digital scholarship capabilities, AI literacy, scholarly communication support and interdisciplinary collaboration can become essential components of institutional research infrastructure. The central proposition of this paper is that the academic library of the digital age should not merely connect researchers with information. It should connect disciplines, people, data, technologies and ideas in ways that encourage the creation, communication and preservation of new knowledge. Such a transformation can position academic libraries as genuine interdisciplinary hubs for social sciences research and enable them to contribute more directly to evidence-based decision-making, institutional research performance and the development of an informed, innovative and resilient society.

References :

- Government of India, Ministry of Education. *National Education Policy 2020*. New Delhi: Ministry of Education.



- University Grants Commission. *Guidelines for Establishment of Research & Development Cell in Higher Education Institutions (HEIs)*. New Delhi: UGC.
- University Grants Commission. *Guidelines for Transforming Higher Education Institutions into Multidisciplinary Institutions*. New Delhi: UGC.
- University Grants Commission. *Curriculum and Credit Framework for Undergraduate Programmes*. New Delhi: UGC.
- International Federation of Library Associations and Institutions (IFLA). *Enhancing Social Science Research in Library Discovery: The Application of Generative AI for Contextual and Exploratory Search*. 2025.
- International Federation of Library Associations and Institutions (IFLA). *IFLA Journal: Trends in Academic and Research Libraries*. 2025.
- UNESCO. *Guidance for Generative AI in Education and Research*. Paris: UNESCO.
- Association of College and Research Libraries. *Framework for Information Literacy for Higher Education*. Chicago: ACRL.
- Tenopir, C., et al. Literature relating to research data services and research-data management in academic libraries.
- Selected recent scholarly literature on digital humanities, open science, scholarly communication, research-data management and artificial intelligence in academic libraries.

