IASLIC 32ND All India Conference 2019

Organised by

University Library, Cochin University of Science and Technology, Kochi

December 3 - 5, 2019

Abstracts of Papers

on

Future of Library and Information (LI) Profession in India

SIG01: Social Science Information

Theme: Performance Appraisal of Libraries/Information Centres

SIG02: Computer Applications in LIS

Theme: *Digital Archiving*



INDIAN ASSOCIATION OF SPECIAL LIBRARIES AND INFORMATION CENTRES (IASLIC)
P-291, CIT Scheme No. 6M, Kankurgachi, Kolkata 700054

e-mail: iaslic.sem@gmail.com Website: www.iaslic1955.org.in

IASLIC 32ND All India Conference 2019

Organised by

University Library, Cochin University of Science and Technology, Kochi

December 3 - 5, 2019

Abstracts of Papers

on

Future of Library and Information (LI) Profession in India

SIG01: Social Science Information

Theme: Performance Appraisal of Libraries/Information Centres

SIG02: Computer Applications in LIS

Theme: Digital Archiving



INDIAN ASSOCIATION OF SPECIAL LIBRARIES AND INFORMATION CENTRES (IASLIC)

P-291, CIT Scheme No. 6M, Kankurgachi, Kolkata 700054 e-mail: iaslic.sem@gmail.com Website: www.iaslic1955.org.in

© IASLIC 2019

All rights are reserved. No part of this Publication can be used nor reproduced in any form or by any means – electronic, mechanical, photocopying, recording or otherwise. It can neither be stored in a database retrieval system, without prior written permission of the publisher except in the case of brief quotations embodied in critical articles and reviews. Making copies of any part of the Publication for any purpose other than owner's own personal use, is a violation of copyright law.

The publisher makes no representation, expressed or implied, with regard to the accuracy of the information contained in the Publication and cannot accept any legal responsibility for any error or omission that may be found in it.

Members of the Editorial Board

Prof Amitabha Chatterjee, Mr S B Banerjee, Ms Indrani Bhattacharya, Prof Narendra Lahkar, Prof Krishnapada Majumder, Prof Pijushkanti Panigrahi Ms Banasree Roy, *Convenor*

Editorial Assistant
Ms Mayuri Das Biswas

Printed by Modern Graphica, 41, Gokul Boral Street, Kolkata - 700012

CONTENTS

SL.	AUTHOR(s)	TITLE	PAPAER	PAGE	
No.			REFERENCE	NO.	
	Sub Theme : Library and Information Profession in New Environment				
1	John Neelankavil S Ally Sornam	Library-Based Research for a Knowledge Society with the Net-Generation : A response to the NEP 2019 Draft	ST-1/2	7	
	Sub Theme : Role o	f Library and Information Professionals and Profe	essional Bodies		
2	J N Satpathi	Role of IASLIC in Shaping LI Services and Profession in India	ST-3/38	8	
3	P Geetha Binu P John Wilson K Cherukulath	Evolving Role of Library with reference to Technical Information Resource Centre (TIRC) of NPOL	ST-3/3	9	
4	Krishna Priya V Mercy Lydia D Stephen T	Librarian as a Social Worker: The Need of the Hour	ST-3/5	10	
5	Apurba J Majumder Gouri S Karmakar	Resource Mobilisation in University Libraries : Proposal for Sustainability	ST-3/6	10	
6	Sanjo Jose Biju V V	What Professional Bodies can do for the Future of Library and Information Profession in India?	ST-3/18	11	
	}	Sub Theme : Library and Information Users			
7	Nisha G Maharaj Chetana Shah Purvi Doshi	Digital Information Literacy among the Faculty Members and Library Staff of Gujarat Adani Institute of Medical Sciences	ST-4/13	12	
8	Shreekala P K Rajalekshmi R	Journalists' Perception of Information Sources and Services available at leading Malayalam Newspaper Libraries In Kozhikode District, Kerala: A Study	ST-4/22	13	
Sub Theme: Reengineering/Reimaging of Library and Information Services					
9	Surendran Cherukodan S Humayoon Kabir	Role of Academic Libraries in Accreditation and Ranking of Higher Educational Institutions	ST-5/31	14	
Sub Theme : New Technology Applications in Library and Information Services					
10	Nancy Waral Gopakumar V	Transition to Mobile Devices to Access the Internet by the Students of Goa University: A Study of Disruptive Technology	ST-6/37	15	
11	Biswajit Saha	State of the Art Facilities of B C Roy Memorial Library of IIM Calcutta	ST-6/7	15	
12	Vishakha R Sarangapani	Cloud Computing and its Applications in Libraries	ST-6/16	16	

13	Sreeja N K Aparna Mohanan Anupama A	YouTube as a Learning Resources for Engineering Education	ST-6/20	17		
14	Ratheesh K Jayasree V	Use of Social Media by Academic Community: A Study with special reference to School of Marine Sciences, Cochin University of Science and Technology, Kochi	ST-6/23	18		
	Sub	Theme: Digital Libraries and Virtual Libraries				
15	Moumita Ash Pijushkanti Panigrahi	Traditional Knowledge of Agricultural Artisan of Rarh Region of West Bengal: Problems and Prospects in Designing Virtual Library System	ST-7/30	19		
	Sub '	Theme : Green Libraries and Inclusive Libraries	•			
16	Susanta Kumar Senapati	Green Library Building : Concept, Custom, Codes and Current Trends	ST-8/29	20		
17	Ashis Biswas	Transformation of Library into Green Library : A Study in Indian Perspective	ST-8/8	21		
18	Achala Munigal	Library Services to People with Special Needs	ST-8/15	22		
19	Nidhisha P K R Sarangapani	Green Library: Concept and Rating Systems	ST-8/17	23		
	Sub Theme : Ap	opplication of New Management Techniques in Lib	raries/ICs	•		
20	Rajib Kumar Das Anuradha Singha	Application of Customer Relationship Management in Academic Libraries	ST-9/9	23		
	Su	b Theme : Management of Online Resources				
21	Devika P Madalli Sagar Gajbe Amit Tiwari	Domain Specific Resource Gateway	ST-10/33	24		
22	Veerankutty Chelatayakkot	Organizational Scheme of Online Resources in Library Websites	ST-10/1	25		
	Sub Theme : Management of Big Data					
23	A R D Prasad	Research Data Management : Role of Library and Information Professionals	ST-11/36	26		
	Sub Theme: Open Data, Open Content, Open Science and Open Knowledge					
24	Mayuri Das Biswas Pijushkanti Panigrahi	Dissemination of Open Government Data through Indian Statistical System : A Roadmap towards Sustainable Development	ST-12/12	27		
25	E R Prakash	Quality of Pre-print Archives : A Case Study of arXiv Archives in the field of High-energy Physics	ST-12/21	28		
Sub Theme : Open Access Movement						
26	Abdul Majid Baba	Open Access Initiatives in University of Kashmir	ST-13/25	29		

	Sub Theme : Skill Development for New Age Library and Information Services					
27	Narendra Lahkar	Developing Skills of Library and Information Professionals : the Need of the Hour	ST-14/28	30		
28	S B Banarjee	Changing the Role of LIS Professionals in Transformation of the Society: Strategies and Skills to Adopt and Attain	ST-14/27	31		
29	Subhra Banerjee Binod Bihari Das Moumita Ash	Skill Development Programmes among Library Professionals for Rendering Effective Services to the Users in an Engineering College Library in the Changing Scenario: A Case Study	ST-14/4	32		
30	K G Sudhier S T Seena	Attitude and Skills on Web 2.0 Technology among Library Professionals : A Study on CHMK Library, University of Calicut, Kerala	ST-14/10	33		
31	Nirmal Ranjan Mazumdar Dipen Deka Sanjay Kumar Singh	Job Diary as a Module of LIS Education for Skill Development with reference to the LIS Education in Assam	ST-14/34	34		
32	Sanjay Kumar Singh Prasanta Kumar Deka	Is Library and Information Science a Professional Course?	ST-14/35	35		
	SIG 01 : SOCIAL SCIENCE INFORMATION Theme : Performance Appraisal of Libraries/Information Centres					
33	Amitabha Chatterjee	A Framework for Performance Evaluation of Libraries/Information Centres in India	SIG01/24	36		
34	Nitai Raychoudhury	Accreditation: the benchmark of excellence for Indian Higher Educational Institutes with special emphasis to Libraries	SIG01/26	37		
	SIG 02 : COMPUTER APPLICATIONS IN LIS Theme : Digital Archiving					
35	Mohd Shoaib Ansari Aditya Tripathi Sneha Tripathi	Repository of Banarasi Saree Designs: Techniques to Preserve its Heritage	SIG02/32	38		

ABSTRACTS of

IASLIC

IASLIC 32nd All India Conference, Kochi

1 Library and Information Profession in New Environment

Paper Ref: ST-1/2

LIBRARY-BASED RESEARCH FOR A KNOWLEDGE SOCIETY WITH THE NET-GENERATION: A RESPONSE TO THE NEP 2019

John Neelankavil CMI, Principal, Chetana College, Chiyyaram, Thrissur, Kerala, frjneelan@gmail.com S Ally Sornam, Associate Professor & Head, PG & Research Department of Library & Information Science, Bishop Heber College (Autonomous), Tiruchirappalli, Tamil Nadu, allysornam@gmail.com

Purpose: National Education Policy (NEP) 2019 emphasises on the research culture, especially at the level of higher education. Despite its well-resourced architecture for higher education, NEP urgently requires an imaginative, flexible exposure to some crucial, practical and ideal concepts on library and library-based research, which would promote to take creative leadership overcoming 'knowledge disaster', otherwise that may adversely affect the entire humanity.

The National Education Policy 2019 should take up appropriate steps to face the challenges positively and implement the recommendations to produce, protect, and promote the quality knowledge for a better humanity.

Methodology: Primary source of data has been used for the study. Field survey method and interview techniques were employed for the collection of primary data from the librarian and the experienced library experts. Both quantitative and qualitative techniques are used for this study.

Findings: This survey has found that majority of the present space management in the university libraries are relevant, though there are areas for betterment.

But the space requirements of the present and for the future is ambiguous and in metaphysical nature. So findings would help in university library space management which is essential to think towards modernization in the present context. Expert opinions are recorded as recommendations for library space management for the present and for the future as well.

Originality: The following 'Five Laws' with special thrust to the university library space management may be useful in todays context: 1) University library is a space for research; 2) Every researcher in the University and his/her research space; 3) Every University library space and its researcher; 4) Catch the mind and provide maximum facilities for the researcher and 5) University Library is a growing research-ecology. This paper also provides recommendations to the Govt. of India, UGC, NAAC and other Institutions of Higher Education to modernize the library space in the university with maximum research facilities for research habitats to facilitate discussion, silent study. ICT facilities are needed to produce quality outputs by continuous research works.

Keywords: Net-generation; Research ecology; Research habitats; Knowledge mission; Knowledge disaster; Knowledge flow; Library space

3 Role of Library and Information Professionals and Professional Bodies

Invited Paper Paper Ref: ST-3/38

ROLE OF IASLIC IN SHAPING LI SERVICES AND PROFESSION IN INDIA

J N Satpathi, President, Indian Association of Special Libraries & Information Centres, Kolkata, West Bengal, satpathijn@rediffmail.com

Purpose: Since its inception, Indian Association of Special Libraries and Information Centres (IASLIC) has tried to give a shape to librarianship profession in India. The main purpose of this paper is to revisit the activities of IASLIC towards re-engineering the librarianship profession, to assess the appropriateness of such activities also to suggest some points to be considered to face future challenges.

Approach: Library has played critical roles in shaping of civilizations of different country in different point of time. India is not an exception. Librarianship was considered a "mission" under the British administration, as librarian became the harbinger of modernization. This continued in post-independent India too as modern libraries started to emerge both in public and private sphere. Considering the critical role of libraries and librarianship, it is important to think of the betterment of library service and timely policies along with professional skill development for all the libraries in the country. Herein lays the importance of Library Associations that coordinate with libraries nationwide and help the LIS profession to uplift its skill and expertise. IASLIC was established in 1955 as a national professional body aimed at promoting quality of library and Information services. It coordinated activities, improved the technical efficiency of the library professionals and acted as a centre of research and studies in special libraries initially.

Findings: By the 1980s, library and information services promptly switched over to computerized system without having the scope and time for getting adequately trained manpower to support it. It needs no explanation that there was a gap between the supply and demand of computer literate workforce in the LIS profession. IASLIC could anticipate the future needs of LIS professionals and to bridge the 'gap' between the demand and supply of computer literate human resources, several programmes have been conducted. IASLIC has by and large fulfilled its role coordinating and harnessing the professional responsibilities in bringing out a harmonious development of the profession and library information services in India. IASLIC continued to hold annual seminars and conferences across the country, conduct study circle meetings at its headquarters and state branches, organize specialised short-term trainings, publish books, serial publications, monographs and pamphlets, and hold special lectures. Today, IASLIC has rightly chosen to provide conscious support to the national effort in evolving an effective library and information service in the country. The contribution made by the IASLIC and its future potential should be appreciated and represented on all policy-making bodies involved in the development of a national information system. It should be admitted that there are operational challenges of running professional body like IASLIC due to lack of fund, human resources, and membership issues. Irrespective of the challenges, IASLIC continue to play a critical role in shaping the course of library movement and library professional.

Value: The librarianship profession is facing a lot of challenges. The LI service nature is getting new shape to meet the demand of the user. Nature of job is also changed. The professional body like IASLIC has to change its strategies in all respect to shape the librarianship profession to fit in the present day context.

Keywords: LI profession; LI professionals; Library movement; Library services; Professional bodies; IASLIC

EVOLVING ROLE OF LIBRARY WITH REFERENCE TO TECHNICAL INFORMATION RESOURCE CENTRE (TIRC) OF NPOL

P Geetha, Scientist E, Naval Physical & Oceanographic Laboratory, Thrikkakkara, Cochi, Kerala, geethapallikkuth@npol.drdo.in

Binu P John, Scientist E, Naval Physical & Oceanographic Laboratory, Thrikkakkara, Cochin, Kerala, bpjohn@npol.drdo.in

Wilson K Cherukulath, Group Director of the Personnel & Administration, Naval Physical & Oceanographic Laboratory, Thrikkakkara, Cochin, Kerala, wilsonkc@npol.drdo.in

Purpose: The Information Communication Technology (ICT) has changed the formats of information resources and the way of their access. This in turn has influenced the information needs of users. Librarians have to act proactively and satisfy the information requirements of readers. This paper describes the changing information needs of users of Technical Information Resource Centre (TIRC) of Naval Physical and Oceanographic Laboratory (NPOL) in the present scenario. It also identifies the new services to be provided as well as the infrastructure facilities and services to be upgraded to meet the users requirement.

Methodology: Data collected from the login registers and the Questionnaire method have been used to conduct the study. The questionnaires were distributed among 123 scientists (various categories), of which 115 responded. This survey has been conducted to find out the preference of users for print and digital media, problems faced while accessing e-journals, purpose of downloading articles, number of e-journals accessed or downloaded. The data collected have been analyzed to reach conclusion. In addition to these, the data in the login registers also help to augment library services more effectively.

Findings: The study shows that researchers like to have both media namely print and digital for information. For immediate requirements, they depend on digital resources while serious and continuous reading they prefer print media. In the digital era, users expect more digital resources in TIRC for reference. Users require new services like videoconferencing and virtual class room facility for knowledge sharing. Everybody knows that library is a calm and peaceful place where anybody (here all employees) can visit at any time and read the materials which they like. In the new era, researchers suggest to have a suitable room in TIRC to conduct brain storming discussions on some of the new topics.

Originality: This study is conducted based on the data collected from questionnaires and login registers. The data are also collected from the discussion with the library committee members and library refurbishment committee members. It tries to find out the exact need of the users in the digital era.

Keywords: Information need; User characteristics; Digital libraries; Techfocuz digital library; NPTEL; DSpace; e-learning; Koha

LIBRARIAN AS A SOCIAL WORKER: THE NEED OF THE HOUR

Krishna Priya V, Librarian, Yuvabharathi Global School, Erode, Tamil Nadu, krishnapriyav291@gmail.com

Mercy Lydia D, Assistant Professor, PG Department of Library & Information Science, Vellalar College for Women, Erode, Tamil Nadu, mercylydia@gmail.com

Stephen T, Head, PG Department of Library & Information Science, Vellalar College for Women, Erode, Tamil Nadu, Stephen@vcw.ac.in

Purpose: The purpose of this paper is to explore the role of librarian as a social worker by providing specialised services to the society. This paper deals with the information needs of the marginalised community especially the transgenders in India. Libraries act as a hub in satisfying the users with their information needs. Libraries can address the various needs of people in the society.

Methodology: The changing information needs, required information sources and usage of library of this community is assessed in this paper. The role of librarian is to provide information to the marginalised people is also discussed. The study focuses on the transgender individuals in the Calicut District, Kerala. For this study we have used questionnaire and interview method for data collection. The questionnaire consists of 20 structured, organised and standardised closed ended questions. It was distributed to the sample to 60 transgender individuals in the Calicut district, Kerala with the help of the NGOs in 'Punarjani Cultural Society, Kerala' which is a transgender organisation. Qualitative data analysis tools were used for analysing the data.

Findings: In this study we observed that transgenders in Calicut district, Kerala are isolating themselves within their community and/or depended on an NGO in transgender Organisation, Kerala for all their information needs. The results of the study necessitated the need to provide information services to the Transgender through the libraries in order to improve their quality of life and empowering this marginally marginalised people. This would be possible if only the librarian act as a social worker.

Originality: Such study has not been done before in Kerala. Information is collected with the help of an NGO in Punarjani Cultural Organisation, Kerala. Transgenders were contacted and discussed what are the problems experienced from the society. We synthesized all the information and used a methodological approach to address the problem and the information need of the transgender community.

Keywords: Information; Transgender; Libraries; Librarian; Social worker

Paper Ref: ST-3/6

RESOURCE MOBILISATION IN UNIVERSITY LIBRARIES : PROPOSAL FOR SUSTAINABILITY

Apurba J Majumder, Assistant Librarian, Assam University, Silchar, Assam, apurbajyoti@gmail.com **Gouri S Karmakar**, Librarian, Pandu College, Guwahati, Assam, gourisankarkarmakar@gmail.com

Purpose: The growing information needs of users because of inter-disciplinary nature of research, availability of documents in various formats, ever-increasing prices and inadequate budget have put university libraries in a challenge in all respects of financial management. The basic motive of this study is to evaluate various

aspects of resource mobilisation and avenues of revenue generation by a university library. It aims to consider the various factors of fund generation to sustain in the curb of recession in university libraries. The study also tries to suggest some important areas for proper access and optimum use of library resources, which will help the library to minimise the library budget and subsequently helping in revenue earning.

Methodology: The study was initiated with consulting existing research documents on various areas of revenue generation, fund and resource mobilisation by a library. Researchers also tried to collect first hand data by sharing experiences of senior library professionals. The various pros and cons are also taken into consideration while drawing the inference. Of course, the emerging new technologies and methods of management need to be considered more for the purpose of the study.

Findings: The study was an attempt to make an idea to propose the ways of revenue generation for university libraries. Today financial resources are decreasing but specialization in various disciplines and emergence of inter-disciplinary researches have increased the complexity and tremendous pressure of users for better and quality services and resources are creating a tremendous pressure on librarians. As the university library is non-profit organization that do not have any income of their own except the library fees and fines received from the student, it should always be kept in consideration that the present day's scenario of prices, service remunerations and programmes under operation should have relation with assistance allocation. This study can guide library professionals to help parent organisation/authority to sustain with the challenges of fund crisis in university libraries.

Value: It is expected that the study will provide a useful podium for further research as well as usability among all type of libraries to be improved.

Keywords: Revenue generation; Library resource mobilisation; Library fund generation; Library recession.

Paper Ref: ST-3/18

WHAT PROFESSIONAL BODIES CAN DO FOR THE FUTURE OF LIBRARY AND INFORMATION PROFESSION IN INDIA?

Sanjo Jose, College Librarian, St Thomas' College (Autonomous), Thrissur, Kerala, sanjojose@gmail.com
Biju V V, College Librarian, Sacred Heart College (Autonomous), Thevara, Kochi, Kerala, bijuvvlis@gmail.com

Purpose: We aim to identify few of the numerous issues faced by the library and information (LI) profession in India due to the lack of legislation and faulty implementation of existing Library Act. We propose solutions for them and emphasise the role of professional bodies in the development of profession.

Approach: The paper addresses the issues in the professional practice, education, continuous professional development and benefits, and suggest solutions which can be achieved by professional bodies.

Findings: Any of the governmental bodies and most of the LI professionals and teachers themselves do not recognise LI as a profession in India, as evident in the present policies and practices. The specific issues identified are lack of professional apex organisation or divisions or special interest groups (SIGs) within them, lack of professional council for stipulating standards and accreditation, lack of continuous professional development (CPD), proliferation of substandard library schools and offering of library and information science (LIS) through online and distance learning (ODL) mode, lack of compulsory internship in LIS programmes and absence of institutes of excellence in LIS education. The status of the profession is affected by the disparity in statutory qualifications of librarians with those of supervisory positions of colleagues and inequality in pay

among librarians in contractual or temporary positions. In higher education, qualified librarians should be recognised as research supervisors and should have the option of lateral entry as LIS teachers. Improper implementation of UGC scheme has caused a lot of demoralisation among the professionals and piling up of court cases. The librarians should be treated as academic staff and libraries as academic departments. Lack of proper staff formulae according to present day library operations has led to huge underemployment and reduced the charm of the profession.

Originality/Value: Organisations or individuals may be working on the above issues/suggestions, but we would like to urge our fellow professionals and professional bodies to work in a coordinated manner to achieve the best by setting priorities and time schedules.

Keywords: Library and Information profession; Professional bodies; Librarianship; India

4 Library and Information Users

Paper Ref: ST-4/13

DIGITAL INFORMATION LITERACY AMONG THE FACULTY MEMBERS AND LIBRARY STAFF OF GUJARAT ADANI INSTITUTE OF MEDICAL SCIENCES

Nisha G Maharaj, Librarian, Tolani Institute of Commerce, Adipur, Gujarat, maharajnisha125@gmail.com

Chetana Shah, Librarian, Dr Babasaheb Ambedkar Open University, Ahmedabad, Gujarat, chetanashah01@gmail.com

Purvi Doshi, Librarian, Gujarat Adani Institute of Medical Sciences, Bhuj, Gujarat, purvinirmal@gmail.com

Purpose: In the era of information deluge and availability of a vast amount of information in digital format, it is a problem for the libraries/information centres to understand, filter and communicate relevant information effectively to the users. Obviously the job becomes easier if the users are digital information literate. Digital information literacy is very helpful for the users to search, locate and utilize pertinent information available in digital format.

The main purpose of this study is to identify the level of digital information literacy and competency in handling ICT among the faculty members as well as library staff of Gujarat Adani Institute of Medical Sciences, Bhuj.

Methodology: In the present study, a quantitative research methodology has been adopted. The data have been collected through structured close-ended questionnaires that were distributed among the faculty members through email and hard copy. The questionnaires were collected online from the respondents. A total number of 100 questionnaires was distributed among the faculty members of all disciplines, out of which 86 responses were received. A Likert scale has been used to measure the perception and attitude of respondents.

Finding: Data analysis has shown that a large number of respondents has very high proficiency in using computer. Majority of respondents are proficient in hardware and software applications in teaching and learning assignments. Further it has been revealed that majority of respondents require e-journals and feel that digital library service was important for them. Among the library staff, majority of them are competent to provide online and offline services. Further it has been found that lack of funds is the main hindrance in the development of digital information literacy among the faculty members.

Originality/Value: Information sources are now being increasingly made available in the digital format and it will be so in future too. In this context the study has shown the importance of digital information literacy among

the faculty members and library staff of a higher educational institute in the field of medical science. This may prompt the authorities of that institute and other such institutes to undertake programmes to develop digital information literacy among the academic staff members as well as LIS professionals attached to the respective libraries.

Keywords: Information literacy; Digital literacy; Digital information literacy; ICT Tools

Paper Ref: ST-4/22

JOURNALISTS' PERCEPTION OF INFORMATION SOURCES AND SERVICES AVAILABLE AT LEADING MALAYALAM NEWSPAPER LIBRARIES IN KOZHIKODE DISTRICT, KERALA: A STUDY

Sreekala P K, Junior Librarian, Junior Librarian, Cochin University of Science & Technology, Kochi, Kerala, sreesudeepk@gmail.com

Rajalekshmi R, Junior Librarian, Cochin University of Science & Technology, Kochi, Kerala, lekshmi555@gmail.com

Purpose: Newspapers are the most influential sources for news as well as views on different issues in the society. The key people who work behind the newspapers are the journalists who need various types of information. A newspaper library must be well equipped with all necessary information sources and provide the journalists access to those sources in order to satisfy their varied needs.

The purpose of this study is to find out the information needs and pattern of use of information sources available in respective libraries, including digital archives of newspapers, by the journalists working in leading Malayalam newspapers of Kozhikode district of Kerala.

Methodology: Questionnaire method was used to collect data. The journalists working with two leading Malayalam newspapers in Kozhikode District, Kerala, viz., *Malayala Manorama* and *Mathrubhumi* were considered for the study. The questionnaires were distributed among a sample of 20 journalists each who are working in these two newspaper organizations. The data collected have been statistically analyzed to arrive at pertinent findings and recommendations.

Findings: The study has found that majority of journalists visit the respective libraries to consult journals and magazines and back issues of newspapers. Newspaper clipping service is the most used service by the journalists. They collect information mostly for preparing news reports, and for writing articles and editorials. It has also revealed that most of the journalists use the libraries of their own organizations and are satisfied with the services they receive from these libraries. Further, all the respondent journalists of *Malayala Manorama* find the digital archive of newspapers very useful, while majority of journalists of *Mathrubhumi* under this study find the archive useful.

Originality/Value: Kerala holds a unique position in India, owing to the high literacy rate in the State and the widespread habit of reading newspapers by general public. This demands high level of accuracy and professionalism from journalists. The libraries attached to a newspaper organization should be able to effectively meet the needs of the journalists. The present study will help to further improve the services of the respective libraries and thereby improve the quality of the newspapers.

Keywords: Newspaper library; Information sources and services; Newspaper clipping service; Digital archive of newspapers

5 Reengineering/Reimaging of Library and Information Services

Paper Ref: ST-5/31

ROLE OF ACADEMIC LIBRARIES IN ACCREDITATION AND RANKING OF HIGHER EDUCATIONAL INSTITUTIONS

Surendran Cherukodan, Assistant Librarian, School of Engineering, Cochin University of Science and Technology, Cochin, Kerala, scherukodan@gmail.com

S Humayoon Kabir, Former Head, Department of Library & Information Science, University of Kerala, Thiruvananthapuram, Kerala, humayoonkabirs@gmail.com

Purpose: Accreditation and ranking of higher educational institutions are important aspects of education across the globe. This study tries to understand the process of accreditation and ranking and explores the role of academic libraries in supporting the parent institution in the process. Since both accreditation and ranking are integral part of assessing the quality of higher education, all institutions give top priority to the process. Academic librarians can take active roles in this process by contributing through multiple ways to improve the services of the library and improve the total academic environment of the institution.

Methodology: Data regarding the criteria for accreditation—were collected from the websites of National Accreditation and Assessment Council (NAAC) and National Board of Accreditation (NBA). The data regarding ranking of higher education in India and global ranking were collected from the websites of National Institutional Ranking Framework (NIRF) and Times Higher Education respectively. Web content analysis was applied for data collection. The data gathered were supplemented by relevant literature search on the area.

Findings: Librarians can contribute to the process of accreditation and ranking through multiple ways. The main areas where librarians can offer help includes the collection and organising the documents regarding accreditation and ranking, preparation of data on the publications of faculty members from sources recognised by the agencies, identification of impact factor of journals, h-index of authors and institutions, giving citation analysis, ensuring the visibility of the scholarly output of faculty members preferably on open platforms, and encouraging and instructing faculty members and scholars for publishing on reputed platforms through conducting workshops on academic publishing.

Originality: Accreditation and ranking of higher educational institutions are important aspects of higher education across the globe. However, scholars in library and information science have so far not attempted studies on this area. This is the first paper of its kind that identifies new roles for academic librarians.

Keywords: Institutional ranking; University ranking; Academic ranking; Accreditation; Academic libraries; India

6 New Technology Applications in Library and Information Services

Paper Ref: ST-6/37

TRANSITION TO MOBILE DEVICES TO ACCESS THE INTERNET BY THE STUDENTS OF GOA UNIVERSITY: A STUDY OF DISRUPTIVE TECHNOLOGY

Nancy Waral L, All Saints' College, Trivandrum, Kerala, nancywaral@gmail.com

Gopakumar V, Librarian, Goa University, Goa, librarian@unigoa.ac.in

Purpose: The new digital age is characterized by technologies that get overtaken by new technologies. We can call them Disruptive Technologies. In recent years, most of our activities like; the way we communicate, the way we share the information, the way we think, and the way we buy things, etc. have changed a lot. Everything is available to us through mouse clicks. Information Technology has emerged as the reason for changes and modernization in human life.

According to Morgan Stanley's report, the mainframe computers took about twenty years to reach mass commercialization, mobile devices have taken around seven years, and social media has taken just three years. It was found in early studies that the students opted to access the internet through their smartphones instead of gathering information from libraries using the traditional method. They have started using electronic gadgets, such as smartphones, tablets for getting access to the Internet. The ample amount of information available from the internet severely reduced the number of users who access the libraries for information. Due to this crisis, the libraries have go automated with provision for access to E-resources and provisions to use their mobile devices.

The main aim of the study was to find out the usage of mobile devices, to know why the students are using mobile devices, to find out the student's attitudes towards mobile devices, and to assess the usage of desktop computers available to students in the library.

Methodology: Survey method was used to collect the primary data from the student of Goa University. Out of 538 respondents only 500 were considered as the samples for the study.

Findings: The study reported that the students preferred to use the Internet on regular basis, majority of the students own mobile devices and they used them for accessing the Internet. The University libraries and departments have a good number of desktops, but it was clear from the study that the respondents preferred to access the Internet through mobile devices.

Keywords: Disruptive technology; Mobile device; internet; e-resource; Student, Goa University

Paper Ref: ST-6/7

STATE OF THE ART FACILITIES OF B C ROY MEMORIAL LIBRARY OF IIM CALCUTTA

Biswajit Saha, Indian Institute of Management Calcutta, D H Road, Joka, Kolkata, West Bengal, biswajit@iimcal.ac.in

Purpose: The library is not only a store house of knowledge, it is also an essential component of the teaching and learning process of an academic Institute. It is a well-established truth that a Library is the center of any educational setting. While class room teaching offers a glimpse of knowledge, the libraries disseminate a vast

variety of knowledge, which is required to attain mental heights. Libraries supplement the educational work of class rooms and lift forward the ideals of education. It calls for competence for acquiring multi and interdisciplinary knowledge in various areas. Use of existing knowledge is as important as the discovery of new knowledge. A library enables a user in identifying the subject of study and in understanding the procedure, of the already recognized and properly recorded information. A well-arranged and equipped library with state of the art service facilities will assist users to carry out new ideas. The purpose of this paper is to highlight the various services provided by the B C Roy Memorial Library of IIM Calcutta, Kolkata, West Bengal.

Methodology: Methods of dissemination of services have been divided in various categories. Users' statistics have been counted to measure the success of some of the services implemented in B.C. Roy Memorial Library.

Findings: It is seen that usage of library resources has increased manifolds after implementing IT based services.

Value: This library is considered to be one of the best libraries in Asia in the area of Management Science and allied subjects. It acts as the learning resource centre and occupies a unique place in academic and research activities of the Institute. It is a fully automated modern Library and Information Centre which provides current, accurate and authoritative information from print and electronic resources using state-of- the-art technology. Over the time, due to the impact of Information Technology, drastic changes have taken place in terms of the collection, organization and the way and nature of service it provides. B. C. Roy Memorial library is a small special library (mainly management library). In spite of various limitations it has implemented a wide range of services which is unique.

Keywords: Remote access; RFID; Discovery service; QR Code; Open access

Paper Ref: ST-6/16

CLOUD COMPUTING AND ITS APPLICATIONS IN LIBRARIES

Vishakha, Research Scholar, Department of Library & Information Science, Bharathiar University, Coimbatore, Tamil Nadu, cutevish.93@gmail.com

R Sarangapani, Professor & Head, Department of Library & Information Science, Bharathiar University, Coimbatore, Tamil Nadu, rspani1967@gmail.com

Purpose: Cloud computing is a recent concept of computer and information science especially in IT services which can be termed as third revolution after Internet. Cloud computing technology came up as a boon for libraries and is offering various opportunities for libraries to connect their services with clouds. Implementing cloud computing, libraries will significantly reduce cost, save energy, register a global outlook on the web optimize their services and expose library patrons to multi-variant Information resources. This study tries to provide understanding on the general relevance of cloud computing to libraries and how libraries can be transformed into smart institutions. Cloud computing initiatives for libraries include OCLC WorldShare Management Services (WMS), Ex Libris, Polaris Integrated Library System, Dura Cloud, LibLime, the 3M Cloud Library App and "dark archive solution" CLOCKSS and PORTICO.

Cloud computing is a platform solution for management of all libraries Systems, including circulation, cataloging, acquisitions, serials, digital resources, internet service, thin client architecture, wireless access point, analytics for data in the system and digital librarian are considered as prerequisites for cloud computing deployment. Cloud computing is an internet based, remote driven and service oriented technology emerged to provide

infrastructure as a service (IaaS), platform as a service (PaaS), and software as a service (SaaS) among others.

Methodology: This paper explains cloud computing, its definitions, historical background, characteristics, models and application of new generation libraries and digital or e-libraries of Academic library comprehensively. The paper explores cloud services, the types and models, and the roles that cloud computing and technologies can play in enhancing library services in the 21st century.

Findings: The papers reviewed have rightly addressed both theoretical and practical aspects of application of cloud computing in libraries, institutional data systems of various parts of the world. It was mentioned in some detail about the application of cloud computing in library like building digital library, searching library data, website hosting, searching scholarly contents, file storage, building community power, enterprise resource planning etc.

Value: Libraries are moving towards cloud computing technology in present times and taking advantage of cloud based services, especially in building digital libraries. Role of LIS professionals in this virtual era is to make cloud based services as a reliable medium to disseminate library services to their users with ease of use and trustworthiness.

Keywords: Cloud computing; Digital library; ICT; Information security; Cloud Librarian; CLOCKSS; PORTICO cloud

Paper Ref: ST-6/20

YOUTUBE AS A LEARNING RESOURCE FOR ENGINEERING EDUCATION

Sheeja N K, Assistant Librarian, Department of Ship Technology, Cochin University of Science and Technology, Cochin, Kerala, nkscusat@gmail.com

Aparna Mohanan, Professional Assistant, SOE, Cochin University of Science and Technology, Kochi, Kerala, aparnakanimolayil@gmail.com

Anupama A, Librarian, MES College, Kochi, Kerala, anupamanavi@gmail.com

Purpose: The study is to evaluate the existing videos available in YouTube related to "engineering lectures" and to explore the perception of engineering undergraduate students on the use of YouTube as an information source for their learning.

Methodology: In order to conduct the study, authors adopted web content analysis and survey method. The study evaluated 100 videos and 50 channels of engineering lectures on YouTube as of 26 October 2019. The study surveyed undergraduate engineering students to explore their perceptions of YouTube as an information source. A structured questionnaire was administrated to 140 undergraduate engineering students studying in School of Engineering (SOE), a department of Cochin University of Science and Technology (CUSAT), which offers undergraduate B.Tech courses in seven branches of Engineering. A total of 120 questionnaires were received which were analysed using frequency and simple percentage.

Findings: The study found that 36% of channels have more than 10 million views and "NPTELHRD" of India is the most subscribed channel with 1.58 million subscribers. The majority of the most relevant 50 channels were uploaded from India. The survey result shows that students used YouTube channels on engineering for their learning purpose with spending 2-3 hours per week. Majority (91%) of the students perceived that YouTube channels supported their study and improved their study habit. Most (82%) of them found that contents of YouTube videos are relevant for enriching their current course. The overall results reveal that the students are

aware of open education resources available on social media and these influence their learning process.

Originality: Scholars have so far not attempted studies on the volumes and relevance of YouTube channels for engineering students. This study is the first of its kind which provides an overview of open education resources available in YouTube. The findings of this study contribute to the research on Internet based open education resources and its role in e-resource management in libraries.

Keywords: YouTube; Engineering lectures; OER; Engineering education; Libraries

Paper Ref : ST-6/23

USE OF SOCIAL MEDIA BY ACADEMIC COMMUNITY: A STUDY WITH SPECIAL REFERENCE TO SCHOOL OF MARINE SCIENCES, COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY, KOCHI

Ratheesh K, Assistant Librarian, School of Marine Sciences, Cochin University of Science & Technology, Kochi, ratheeshk@cusat.ac.in

Jayasree V, Professional Assistant, School of Marine Sciences, Cochin University of Science & Technology, Kochi, Kerala, jayasreernair@gmail.com

Purpose: Social media brought many changes in the composition of learning environment as it provides access to more users with the credibility of unlimited time and place. This paper aims to analyse the actual use of social media by academic community of School of Marine Sciences, CUSAT. The wide acceptance and liking for social media can be beneficial in education, the major one being its use as a means of communication.

Methodology: The population of the study consisted of postgraduate and research scholars of School of Marine Sciences. The sample size included 150 students. A questionnaire was distributed for data collection. The data was then analysed using simple frequency calculation.

Findings: Technology inclined education has extended new features to learning. Social media- the new form of communication in the present age has become popular among all sections. Social media can be broadly defined as web based communication tools that enable people to interact with each other by sharing and consuming information.. Social media helps to connect people with similar interests and academic community can make use of social media for knowledge creation and dissemination. Social media provides an array of opportunities for communication, interaction, sharing and socialization. Blogs, social networking sites, virtual worlds, content communities etc are some of the communication tools included in social media. The study revealed that majority preferred using Whatsapp and they used social media for learning and academic activities, communicating with researchers, colleagues and collaboration with research projects. Students preferred online media as the most important source for getting information updates. Social media played a vital role in supporting communication and collaboration among academic community across the world. It helps the academic community in acquiring new information; endowing integrative learning, information sharing, and it facilitates expansion of knowledge through inspiration and enthusiasm among groups of people. Social media can be effectively used for advancement in the academic activities, for knowledge creation and dissemination apart from their recreational aspect, considering its popularity among students

Originality/Value: This is the first time a study of use of social media by academic community of School of Marine Sciences has been conducted from the angle of its role in research, learning and academic activities. The study will help to understand social media as a learning tool apart from its recreational role.

Keywords: Learning tool; Social media; Academic community; School of Marine Sciences; Cochin University of Science and Technology; India

7 Digital Libraries and Virtual Libraries

Paper Ref: ST-7/30

TRADITIONAL KNOWLEDGE OF AGRICULTURAL ARTISAN OF RARH REGION OF WEST BENGAL: PROBLEMS AND PROSPECTS IN DESIGNING VIRTUAL LIBRARY SYSTEM

Moumita Ash, Librarian, Vidyasagar College for Women, Kolkata, West Bengal, ashmoumita@gmail.com Pijushkanti Panigrahi, Professor and Head, Department of Library & Information Science, University of Calcutta, Kolkata, West Bengal, panigrahipk11@gmail.com

Purpose: The Rarh Region is selected as it is very geographic and anthropologic uniqueness in nature. The history of agriculture and its relation with artisans of Rarh Region are very long past. The artisans produce different eco-friendly agricultural tools regarding harvesting and storage. But with mechanization of agriculture, the artisans are economically and socially ambushed and disappeared with their thousand years enriched specialized knowledge. Documentation of traditional knowledge of agricultural artisan at virtual library framework is essential for its proper utilization in future. Differences and challenges need to be addressed for its implementation.

Methodology: The knowledge of agricultural artisans of a particular region are identified, classified, and analysed the scope of archiving at digital media platform. For this study, the agricultural artisans of Rarh Resign of rural Bengal have been considered as sample.

Findings: From the study, it has been found that declining traditional knowledge of agricultural artisan now belongs to geographically scattered, culturally fragmented rural communities who are not potential enough to self archive their knowledge at digital media platform. This tacit community knowledge is disappearing rapidly with changing paradigm of social structure and industrialization of agricultural tools. But the knowledge of artisans may be used for eco-friendly sustainable agriculture and rural live hood. The archiving process of this crowd source knowledge framework for virtual library system is identified also. Social media channels are very fruitful to archive and disseminate the crowd knowledge. YouTube and Flickr are exemplary for multimedia as well as photographic archiving of such type of non-documented community knowledge. Geotagging facility helps to identify the exact location which is very much relevant for crowd source knowledge. In secondary part of archiving, librarians and other information professionals can make cluster of this particular knowledge base by using national portal in decentralized way with the help of discovery search tools. Open Source Software like Omeka may be used.

Value: The observations conclude that knowledge of agricultural artisans of Rarh Region is a source of tacit knowledge base. This type of tacit community knowledge will be documented by following the guidelines of World Intellectual Property Organization (WIPO) with interdisciplinary approach. The conservation of agricultural artisans' knowledge also support the United Nations 2030 Agenda for sustainable development specially goals 12 which is regarding responsible sustainable consumption and production pattern.

Keywords: Traditional knowledge Resource; Agricultural artisan; Virtual library; Crowd sourcing

8 Green Libraries and Inclusive Libraries

Invited Paper Paper Ref : ST-8/29

GREEN LIBRARY BUILDING : CONCEPTS, CUSTOMS, CODES AND CURRENT TRENDS

Susanta Kumar Senapati, Principal Technical Officer & Head, Knowledge Resource Centre, CSIR – Central Building Research Institute, Roorkee, Uttar Pradesh, senapati@cbri.res.in

Purpose: Speedy industrialization, large scale of construction work, heavy uses of non-renewal energy, deforestation, huge population growth, excess exploitation of natural resources and man-made disaster are the common responsible factors of global warming, pollution, natural imbalance and climatic change. Due to effects of the factors the people and other living being are facing day to day health problems, facing natural disasters at global level. The peoples have been concentrated in town and cities due to availability of employment, basic facilities and amenities like education, health so called modern urbanization. The real problem arises to provide shelter and provision of infrastructure to all. So why the construction works of different kinds and capacity are rising day to day. Due to space problems, the multi-storey building are coming up in cities and town with a massive scale made on modern concrete structure using tons of cement, steel and other plastic materials. The habitat required modern electrical equipments for thermal comfort (heating and cooling), pumping and lifting and so on. The present town and cities converted into concrete jungles without any natural plants and vegetation. The balance of eco system has been depleted at a very fast speed so peoples are raising their hands to save nature and save their lives. Due to this real problem the concept of green buildings came out and is practicing nowadays. Due to Govt.'s liberal policy on education a large number of private educational institutions are growing rapidly like mushroom growth. So by and large each institution has a library. The library is placed in a prominent place as a separate building in their campuses. Now architect and librarian to concern about green construction with minimum energy consumption so why green library building came up nowadays. Not only for new construction of library building but also thinking about the measures of existing library building to convert into a green one. This research article is to explore the practices on green library building in India and abroad. Elaborates the present standards, codes and guidelines are available for green library building. The paper describes IFLA's contribution on Green Library. It enumerates different steps towards making green library building for existing and new one.

Methodology: Being a theoretical research, thorough literature survey method has been followed from professional journals / books /online matters and also patent database for patents related to green library building.

Findings: Collected information gives the present scenario on green library and buildings and finds out the practical steps to be taken towards making exiting library a green library.

Originality: This study is explores from the present literature as well as patent database. The experiences of implementing green library in CSIR-CBRI, Roorkee are shared.

Keywords: Green library building; Green library; Current practice; Codes and Standards; Laurie Baker

TRANSFORMATION OF LIBRARY INTO GREEN LIBRARY : A STUDY IN INDIAN PERSPECTIVE

Ashis Biswas, Librarian, Victoria Institution (College), Kolkata, West Bengal, lisbashis@gmail.com

Purpose: This study discusses the need of protection of environment and energy conservation through green practices. The green practices emphasize on nature conservation, economic and social wellbeing, mental and physical health, and a sustainable future for humans. There is no alternative rather than library which is regarded as social institution to spread the messages about green practices. To do it properly library first of all has to transform itself as green library. Green library is designed to minimize negative impact on the natural environment and maximize indoor environmental quality by means of careful site selection, use of natural construction materials and biodegradable products, conservation of resources (water, energy, paper), and responsible waste disposal (recycling, etc.). It also focuses on social responsibility of library as leader for environmental sustainability. In country like India where rapid growth of population is adversely affecting natural resources and environment the establishment of green libraries is very much essential.

Methodology: This study has mainly presented how the libraries can be transformed into green libraries in India following the seven green features, i.e., i) Sustainable Architecture and Design, ii) Site Selection and Planning, iii) Water Conservation, iv) Energy Efficiency, v) Building Materials and Resources, vi) Indoor Environmental Quality, vii) Innovation and Development addressed by Indian Green Building Council (IGBC). These features for green building have been taken into consideration for green library.

Findings: It has been discussed that to establish green libraries a careful planning is done following the green building code. It requires preparing library building with the provision of water and energy conservation, waste management and healthy indoor air quality. On the other hand collections and collection development in green libraries have been discussed in three ways, i.e., selection of materials which help to generate awareness about green practices, de-selection processes that highlights the need and method of reuse and recycling of materials, and selection of format of information sources (print or electronic) which produce less CO₂ emission. Whereas green services have indicated to provide services consuming less paper and energy. It has also been shown that transformation of library into green library in India will be cost effective because some indigenous methods can be applied for the sustainability of library. Some notable techniques of cooling and ventilation used in Indian palaces, use of profusely available agro-based products for building materials and furniture, organic pesticides, reuse habit etc. are very much worthy to be mentioned here. Some green codes in addition to IGBC and Indian green library initiatives have also been referred.

Value: This study shows that establishment of green library does not require big budget. It only needs the awareness about green practices and endeavour to make the library green with help of competent stakeholders. Therefore this study will help LIS professionals to plan for green library.

Keywords: Energy conservation; Green building; Green codes; Green library; Green practice; Green services; IGBC; Sustainable library

LIBRARY SERVICES TO PEOPLE WITH SPECIAL NEEDS

Achala Munigal, Assistant Professor. (LIS)/Assistant Librarian, University College of Science, Osmania University, Hyderabad, Telangana, achalamunigalrao@gmail.com

Purpose: The mission of any library is to provide access to information and resources to its users. But the users of Academic, Private, Corporate, Special libraries are defined. Only Public Libraries were established to cater to community in general irrespective of Gender, Age, Caste, Creed, Sex, Status etc., and to ensure everyone has a right to access Information. Public Libraries are funded from public money like taxes or various cesses. But how does this pan out practically for general public some of who have special needs? Are there any libraries to address special needs of people? Or are there any libraries which provide special services to these special groups in public libraries in India?

Methodology: Online research method was employed and various online resources including newsletters, newspaper articles etc were explored to cull out relevant data.

Findings: There are 1,46,173 public libraries in India. To cater to niche groups or people with special needs there are only 115 Mahila (women) public libraries and 9 Braille public libraries in Gujarat, to cater to the Blind. There are 98 children's public library in Gujarat and 34 in Karnataka; What are the rest of the states doing for special needs people? There are 32 State Central Libraries in India including 2 for the state of Gujarat. There are no State Central Libraries for Uttarakhand, Daman, Chattisgarh and Andhra Pradesh (after bifurcation) and Ladakh. Since there is paucity of public libraries so 742 part time libraries were introduced in Tamil Nadu, 70000 Rajya Sikshan Kendra Libraries opened in primary school for public and 27000 Rajya Sikshan Kendra Libraries opened in Middle School for Public in Madhya Pradesh and 1608 Higher Secondary School Library opened for Public in Chhattisgarh (Banerjee, n.d.). But what about the rest of the spectrum of special needs like Geriatric, Infirm or Prisoners? Academic, Private, Corporate, Special Libraries are increasingly getting dependant on online sources accessible via the Internet as a source of information as the users are increasingly utilising Information and Communication tools, technologies, devices and equipment to access this information via the Internet. Public Libraries are not far behind in adopting the various tools, technologies, devices and equipment to provide information to its users.

Originality: This article presents ideas implemented in various public libraries in India to make libraries inclusive and cater to people with special needs which has not been documented in any article. It also includes the various libraries like mobile libraries (also called Bookmobile, Bibliobus, etc) and library services that are extended by government, NGOs, CSR initiatives by Corporates and individuals from general public.

Keywords: Library services; Inclusive libraries; Mobile libraries; Bookmobile; Bibliobus; Children library; Prison library

GREEN LIBRARY: CONCEPT AND RATING SYSTEM

Nidhisha PK, Research Scholar, Department of Library & Information Science, Bharathiar University, Coimbatore-641046, Tamilnadu, nidhishapk@gmail.com

R Sarangapani, University Librarian & Head I/C, Department of Library & Information Science, Bharathiar University, Coimbatore-641046, Tamilnadu, rspani1967@gmail.com

Purpose: Environmental rating is the need of the day. Green libraries, also called sustainable libraries are a part of the larger green building movement. A Library building also has impact on the environment either directly or indirectly so has to go through some environmental checking by green building rating system. Various green building rating systems are available to rate the library buildings to make it sustainable. IGBC and GRIHA are the two councils operating in India to assess green libraries. BREEAM, LEED, Green Globes and Green Star are the most popular and widely using Green Rating Systems internationally.

The paper presents the concept of green library and some choices of green building rating system available in India and in other countries such as IGBC, GRIHA, BREEAM, LEED etc.

Methodology: The librarians should be responsible to make society aware of the green issues and related concerns. They should be up-to-date with technology, web tools and architecture. So that they can guide and instruct the community to a better environmental practice through library collection, betterment of environmental facilities and offering green library programs and green library courses.

Findings: The need of certification of building, the government's requirement and the minimum requirements of certification are some of the points to be considered while selecting a rating system. In common all the rating systems are designed to evaluate location, water and energy efficiency, operation and management, innovations and indoor quality of buildings.

Value: The concept of green library has gained importance in the present society which mainly aims to minimize the environmental impact. The green building rating system is an aid for environmental checking of library building thereby reducing the impact on environmental factors and ensures effective utilization of resources like water, energy, and paper. Moving towards green, a library can achieve several benefits such as preservation of resources, economic benefit, improving air quality and can solve environmental issues affecting the library.

Keywords: Green library; IGBC; GRIHA; BREEAM; LEED; Green globes; Green star; CASBEE

9 Application of New Management Techniques in Libraries/ICs

Paper Ref: ST-9/9

APPLICATION OF CUSTOMER RELATIONSHIP MANAGEMENT IN ACADEMIC LIBRARIES

Rajib Kumar Das, Librarian, Girls' College, Kokrajhar, Kokrajhar, Assam, rajib.librarian@gmail.com

Anuradha Singha, Librarian, Science College, Kokrajhar, P. O. & Dist: Kokrajhar, Assam, anuradha.librarian@gmail.com

Purpose: Library and Information Centres are based on three major pillars, first one is Information Resources second one is Staff and the third and most important among them is its user, and without it the library is a body

without soul. Laws of Library Science also stress on the user satisfaction. To keep pace with the Technological advancements and information explosion libraries are compelled to work for user centric approach. The library has to address the user demand and for that reason Customer Relationship Management (CRM) should be adopted. CRM indicates "The strategic process of shaping the interactions between a company and its customers with the goal of maximizing current and lifetime value of customers for the company as well as maximizing satisfaction for them". CRM is a process or methodology or strategy used to learn more about customer's requirements and behaviours to develop stronger relationship with them. The purpose of the paper is to assess the impact of CRM in their work and their perceived level of satisfaction towards academic library services. The primary approach of the present study is how to implement the basic CRM in the academic library. Libraries consider adopting CRM concept and applications as one of the possible solutions to secure users' satisfaction while facing the challenges brought by information explosion, flourished information service channels and users' higher expectations.

Methodology: To understand the aspects within single, real-life settings during the implementation of CRM process, the case study method was adopted.

Findings: The findings highlight the importance to overcome libraries' inexperience in terms of CRM implementation management, and demonstrate that the biggest challenge facing a library is to raise internal awareness of the CRM functions and capabilities that are now provided, and to educate library staff on how these functions and features operate. The biggest problem of implementing a CRM system in academic libraries is to raise internal awareness of the functions and capabilities that are now provided, to educate library staff on how these functions and features operate, and to clarify the different roles played by the automation system, online reference service and the CRM system.

Originality/Value: The paper provides useful information for those wanting to implement a CRM system in an academic library context.

Keywords: CRM; Customer relationship management; Academic library; Library management

10 Management of Online Resources

Paper Ref : ST-10/33

DOMAIN SPECIFIC RESOURCE GATEWAY

Devika P Madalli, Professor & Head, Documentation Research and Training Centre, Indian Statistical Institute, Bengaluru, Karnataka, devika@drtc.isibang.ac.in

Sagar Gajbe, Research Scholar, Documentation Research and Training Centre, Indian Statistical Institute, Bengaluru, Karnataka, sagar@drtc.isibang.ac.in

Amit Tiwari, Research Scholar, Documentation Research and Training Centre, Indian Statistical Institute, Bengaluru, Karnataka, amittiwari@drtc.isibang.ac.in

Purpose: The twenty-first century has witnessed enormous growth of domain specific information and information resources. The emergence of new domains has posed a challenge to the organization and management of information resources. Though available in abundance on internet, of then required information is not readily available as the information in domains is scattered and may not be represented using standard metadata or any metadata at all. For the end users it can be a time consuming process to look for and access useful domain based information.

A number of specific domains and a huge amount of information resources have led towards a requirement of domain based information systems and services. Content Management Systems (CMS) are used as tools bring online information from various domains together. CMS can be used for developing domain specific information systems. The shift towards domain based information services has implications for libraries and the use of online resources. The purpose of the study is to building current awareness services using RSS feeds and offer categorized information according to the user needs.

Design: Many of the online resources and even services provide RSS feeds. The present work is based on various online resources that provide RSS feeds in the domain of Big Data and Artificial Intelligence. RSS feeds are aggregated to form a subject gateway providing a unified current awareness service. For the deep understanding of the domain, Study of Subject approach could be used.

Findings: Current Awareness Service is one of the most popular services provided by memory institutions. The present aggregation works an online current awareness service for the students and scholars of Big Data and Artificial Intelligence. The methodology can be adopted for developing Current Awareness Service in other domains as well. The subject gateway incorporates an exhaustive list of information sources of the domains mentioned that will be updated in real time based on syndication.

Value: This paper discusses current awareness services based on syndicated resources deployed to aggregate online resources that provides current and updated domain based information to the users.

Keywords: Online resources; Domain specific resource; CAS; Subject gateway; RSS feed; Big data; Artificial intelligence

Paper Ref: ST-10/1

ORGANIZATIONAL SCHEME OF ONLINE RESOURCES IN LIBRARY WEBSITES

Veerankutty Chelatayakkot, Deputy Librarian, Cochin University of Science and Technology, Kochi, Kerala, veerankutty@cusat.ac.in

Purpose: In the present circumstances, a library website is considered as a subject gateway, portal as well as Virtual Public Face of the institution. The content organization and representation order of resource type in the library website is very crucial as a user may be able to find the resources within minimum mouse clicks. This study aims to analyze organizational scheme of online resources in selected library websites.

Methodology: The author selected library websites of top Nine IIT's in MHRD-NRIF ranking to analyze the resource type, access point, mouse clicks required to get access and content organization in user perspectives.

Finding: Based on the previous studies, nine resource types were identified. Out of nine resource types, Databases are the most common resource type followed by E-Journals and E-Books that are found in the library websites. IIT Bombay, IIT Roorkee, and IIT Indore have links to seven resource types. The "three-click rule" is an unofficial web design rule concerning the website navigation, that a user may be frustrated if he is not able to find the resources within three mouse clicks. The study reveals that IIT Kharagpur, IIT Dhanbad, and IIT Indore has given 'E-resource ' as first link/click, and remaining resource types as second link/click that a user may apply more clicks to get access to. Similarly, the study reveals that the resource type Databases, 6 IIT's arranged alphabetically followed by content type by 5 IITs. IIT Kharagpur and IIT Indore organized Databases both alphabetically and by content type. Regarding E-Journals, the preferred arrangement is alphabetical order (78 %) followed by publisher order (56 %). Four IIT's use both orders for the arrangement of E-Journals. E-Books are arranged publisher wise (78%), and IIT Bombay provided a link to OPAC. The preferred order of print

journals is alphabetical. All 9 IIT's provided links to Institutional Repository /Digital Library. 5 library websites provided links to open access resources and 67 % libraries provided search option and user manual.

Value: The design and content organization on a website is very crucial, and if done properly it can create excellent leverage for the institution.

Keywords: Library websites; e-resources; Representation order of resources

11 Management of Big Data

Plenary Speech Paper Ref: ST-11/36

RESEARCH DATA MANAGEMENT: ROLE OF LIBRARY AND INFORMATION PROFESSIONALS

A R D Prasad, Former Professor, Documentaiton Research and Training Center, Indian Statistical Institute, Bengaluru, Karnataka, ardprasad@gmail.com

Purpose: Thus far much of the data generated by various research and scientific communities has not been shared, much worse it has not been organised. The open access to information movement paved the impetus and ideological justification to open up the data, so that the data can be reused. Though Open Access to Information (OAI) largely bridged the digital divide in case humanities and social sciences, it has done to a lesser extent in the case of natural and physical sciences. Both the physical and natural science do require expensive laboratory infrastructure. If the data generated out of these laboratories and equipment is shared, the organisations that do not have financial support to build infrastructure could use the data generated by privileged laboratories and do interpret the data in a different way or at least support and ascertain the finding of others. One of the best examples of data sharing is the availability of human genome data on the Internet. The paper presents the advantages of open data as against closed data. The guiding principle in the world of research data is based on FAIR principles – Findable, Accessible, Interoperable and Reusable. The library and information science professionals have a great responsibility in managing research data based on FAIR principles.

The Government of India, way back in 2012, introduced the National Data Sharing and Accessibility Policy (NDSAP), which mandates all the organisations funded by the Government of India to make the data publicly available on the site http://data.gov.in. However, in spite of India having a huge number of research laboratories, and universities conducting research, it does not reflect on the volume of data that is available on data.gov.in. This is, largely, because the scientists are not aware of the mandate, besides being poorly equipped in organising and preserving their own data as it warrants the skills of library and information science professionals. Even the library and information science professionals, in spite of their background knowledge and skills, they too require orienting their knowledge in organizing and preserving data. The purpose the presentation is to promote the advocacy of Open Data and highlight the role of library and information professionals in Research Data Management. To put it succinctly Data Curation and Open Data should be the rallying point in sharing data.

Methodology: Data Curation is arguably a very important aspect of Research Data Management. The paper enumerates the methodology to be followed in data curation which includes – Creating/Gathering verifiable digital data assets. In other words, ensuing trustworthiness and integrity of data; Describing the data using Metadata to make it Findable and Accessible; Using Open Standards for Data (Interoperable), Classifying

(Ontologies) in order to group the data sets available on the Net so that related data can be aggregated if necessary; tagging the necessary licences, preferably Creative Commons Zero (CC)) to the data sets to explicitly pronounce the terms of re-usability; Backup, Archiving/Distributing so that the data remains **R**eusable.

Findings: A major finding of the work carried out in this regard is that of identifying the four major stake holders in research data management. Domain Experts, belonging to various disciplines. They generate the primary data. The Library and Information Science professionals, who capture and curate the data by doing deduplication, filling up the missing values, converting the file format of the data sets to ensure interoperability, adding metadata, ontologies and publishing the data following the FAIR principles. In case of large data sets, which are mostly generated by equipment, CCTV cameras, satellites, social media etc. Computer Science professionals come into the picture to provide platforms to handle huge volume of data. One of the major objectives of Data Science is to do analytics on data, which normally calls for expertise of Statisticians. One should not forget Business Analytics is an emerging area. The task of Library and Information Science professionals is to make data – analytics ready. In other words, the stake holders are Domain Experts, Library and Information Science professionals, Computer Science experts and Statisticians.

The paper briefly presents the findings of using software for data curation, especially the software for ETL (Extract, Transform & Load) – OpenRefine, Datameer, Talend, Informatica, DbFit. The presentation also covers Data Management Plan (DMP) and enumerate various funding agencies requirements of DMP. Additionally, the presentation mentions the software for data publishing/data repositories – Dryad, dataVerse, CKAN.

Originality: World wide there is awareness in making the data openly accessible. The central theme of the paper is to emphasise the role of the library and information professionals in advocacy of open data, data curation and building data repositories.

Keywords: Open access; Open data; Data curation; Fair principles; Research data management; Data management plan; Library and Information professional

12 Open Data, Open Content, Open Science and Open Knowledge

Paper Ref : ST-12/12

DISSEMINATION OF OPEN GOVERNMENT DATA THROUGH INDIAN STATISTICAL SYSTEM: A ROADMAP TOWARDS SUSTAINABLE DEVELOPMENT

Mayuri Das Biswas, Head Librarian, J. D. Birla Institute, Kolkata, West Bengal, mayuridasbiswas@gmail.com Pijushkanti Panigrahi, Professor and Head, Department of Library & Information Science, University of Calcutta, West Bengal, panigrahipk11@gmail.com

Purpose: The potentiality of Indian Statistical System (ISS) in dissemination of government data for sustainable development needs to be explored. This paper is to find the relational importance between the organizational structure and corresponding functional activities of Indian Statistical System in regard to dissemination of data. The most possible ways for achieving the Sustainable Development Goals (SDGs) as set by the United Nations Development Programme (UNDP) are to be identified and to correlate them significantly with roles of ISS played in this regard. This paper is to further analyze how socio-economic values could be added to open government data in accelerating overall development of the nation.

Design/Methodology: UNDP annual reports and the official site of Ministry of Statistics & Programme Implementation (MoSPI) have been examined. The prevailing responsibilities and activities of ISS have also been analyzed. In regards Open Government Data (OGD) initiatives have been studied carefully to see its usefulness towards greater democracy with an aim for transparency, participation, and collaboration. This study investigates the methods of data collection by ISS and data curation thereby. Benefits of open data policy are also discussed critically. Finally, the study identifies the issues and challenges encountered by ISS in regard to the openness of data.

Findings: The study indicates that national statistical system needs to embrace and harness the explosive data revolution in the present economy. In this regard, a crucial role is played by ISS as an intermediary between data collection and publicizing the same through open data portals to enable public accessing easily for meeting their necessities. This paper further establishes the fact that the curated data, when accessed and analyzed, may help in tracking the environmental, social and economic progress of our country and strive to lead the nation towards achieving the SDGs. Therefore, if ISS retains any rigidity of being conservative gatekeepers of their data stores, it might bring forth huge retardation in socio-economic development of our nation.

Value: This study is an attempt to identify the barriers in the activities and services rendered by ISS and to suggest possible improvements in making retrieval of data easier for users. A well organized statistical system would enable monitoring of SDGs and encourage dissemination of reliable and accessible open government data which, in turn, would help government in designing better policies and programs enabling progress and decision-making for sustainable development.

Keywords: Data sharing, Indian Statistical System, MoSPI, NDSA policy, Open data, Open government data, Statistical data, Sustainable development goals, UNDP.

Paper Ref : ST-12/21

QUALITY OF PRE-PRINT ARCHIVES : A CASE STUDY OF ARXIV ARCHIVES IN THE FIELD OF HIGH-ENERGY PHYSICS

E R Prakash, Scientific Information Resource Division, Knowledge Management Group, Bhabha Atomic Research Centre, Mumbai, Maharashtra, prak@barc.gov.in

Purpose: Preprints are publicly available scientific manuscripts posted on dedicated preprint servers prior to publishing in journals or conferences. Since they are all open, anybody can upload the research output for the review comments. Then the question arises about the quality of the uploaded pre-prints. It is believed that many of the pre-prints are getting published as either journal articles or conference papers. The present study attempts to 1) assess the amount of pre-prints in the area of 'High-Energy Physics' of arXiv services operated by Cornell University are published as journal articles and 2) list the top journals in which the pre-prints are getting published and 3) analyse the quality of the pre-prints by evaluating the impact factors of the journals in which the pre-prints are published.

Methodology: The High Energy Physics-preprints in arXiv are again categorized as: High Energy Physics – Experiment (hep-ex), High Energy Physics – Lattice (hep-lat), High Energy Physics - Phenomenology (hep-ph), and High Energy Physics – Theory (hep-th). The pre-prints submitted to these categories during 2014-2018 are taken as sample of the study. Impact Factor assigned to journals included in Web of Science by Clarivate Analytics is taken as the parameter for quality of the journals in which the pre-prints are published. The 'Journal-ref:' field used by arXiv in the pre-print records is used to list the journals in which the pre-prints are published.

Findings: The percentages of pre-prints submitted during 2014-2018 and published as journal articles in the four categories are 55 (hep-ex), 42 (hep-lat), 48 (hep-ph), and 44 (hep-th) respectively European Physical Journal C; Journal of High Energy Physics; Physical Review D; Physical Review Letters; Physics Letters Bare the journals in which most of the pre-prints are published and all the five journals have impact factors more than 4. Among the pre-prints published in journals, 82 % are published in journals with Impact Factor more than 4 and 6 % are published in journals with Impact Factor more than 6. One third of the pre-prints in the categories are published in journals having impact factor range of 4 to 6.

Value: The results of the present study may be an eye-opener for Library and Information Science professionals to consider pre-prints as a reliable and qualitative sources of information in many subject areas.

Keywords: arXiv; Pre-prints; Open access quality assurance; High-energy physics; e-prints; Archives; Journal publishing

13 Open Access Movement

Invited Paper Paper Ref: ST-13/25

OPEN ACCESS INITIATIVES IN UNIVERSITY OF KASHMIR

Abdul Majid Baba, University Librarian, Central University of Kashmir, Jammu & Kashmir, abmbaba@cukashmir.ac.in

Purpose: The article tries to highlight the benefits of Open Access Repositories for authors and researchers, direct Users, Universities, Libraries and Librarians and also for creating Public Opinion. It brings into focus some of the pioneering open access initiatives of the University of Kashmir. It calls for collaborative action on the part of various stakeholders to further the cause of Open Access Movement.

Methodology: The study explores the various Open Access Initiatives taken by University of Kashmir and describes in some detail the rich data held by these repositories. Drawn from author's rich professional experience in the field, observations are made on various aspects of Open Access repositories and particularly on the benefits derived from the University of Kashmir's association with the programme.

Findings: Authors prefer to publish their articles in Open Access resources as this maximizes their research impact. Open access extends the reach of research beyond its immediate academic circle. Universities prefer Open Access as they want their research work to have maximum impact in the wider academic world. Libraries are strong advocates of Open Access because it helps in removing price and permission barriers and makes knowledge available to all. The University of Kashmir's virtual library has online journals, e-books, e-newspapers and the entire collection of Social Science Library of Tufts University. The Digital Repository has the university's own research output on the web for wider access. There are number of good educational institutes in Jammu and Kashmir and developing a common institutional repository for all these institutes including the universities, is the need of the hour.

Value: In order to make the Open Access Programmme successful there has to be awareness building exercises in various institutions. In the past, once the records held by the University of Kashmir's administrative departments were severely damaged due to fire. Such mishaps can be avoided in future by digitizing the records of other official departments also along with scholarly publications.

Keywords: Open access; University; Institutional repository; Library; University of Kashmir

14 Skill Development for New Age Library and Information Services

Invited Paper Paper Ref: ST-14/28

DEVELOPING SKILLS OF LIBRARY AND INFORMATION PROFESSIONALS : THE NEED OF THE HOUR

Narendra Lahkar, Former Professor, Department of Library & Information Science, Gauhati University, Guwahati, Assam, nlahakar@gmail.com

Purpose: The paper is identifying the skills to be acquired by Library and Information (LI) professionals to enable to work in the changing environment of librarianship. The changes are in continuation and also inevitable; librarianship is not an exception. It is essential to prepare LI professionals for developing the workings and services in the changed environment. Moreover, what changes we have noticed and taken place today are to change in continuation. Discussion has been made in the paper of the changes noticed and to consider the areas, the LI professionals are to cope with to meet the challenges of the present and days to come.

Methodology: Discussion with both senior and junior professionals and the library users' approaches towards Library and Information Centres (LICs) and their expectations have been taken into account. It is based on experiences of the author and the literature available in both printed and digital are the main focus of the paper.

Findings: While considering the skills to be acquired, broadly, they can be categorized into two: soft skill and hard skill. Of the soft skills, leadership, communication, collaboration/team work, time management, Interpersonal skills, are some of them. These have resulted for development of Interpersonal skills communication, collaborative approaches, and the leadership.

Hard skills are to be acquired in most cases formally. Acquiring knowledge through study and teaching, gathering knowledge at work place are some of the areas where hard skills can be acquired. Participating in the teaching and learning process in formal and informal education, online courses, through readings, and the job pursuing can form the bases for acquiring hard skills.

In LI field, it is essential for developing one's skills in both traditional or conventional librarianship and the modern issues especially use of Information and Communication Technology (ICT) devices in library works and services. Techniques used for developing the catalogues and catalogue databases, library classification using modern approach especially with the publications available as a result of in-depth study and research in different fields, the reference and information services with new approaches are some of the fields in LIS inviting attention of LI professionals for developing their skills.

LI field is rapidly changing for various reasons. Because of use of ICT devices in performing library jobs the growth is becoming more visible. Meeting users' needs in right perspectives has become imperative and working LI professionals are to continuously develop their skills to cope with the regular changed working environment. Mentions may be made few of them like: Digital/ Virtual/ Green libraries, Massive Open Online Courses, Open Access Movement, Big data, Data Science and so on.

Originality: The outcome of the study enables especially LI professionals to develop one's ability to work for the profession with much confidence, dedication and vigor. Changes are inevitable and in continuity towards new height. The LI professionals are getting a scope of identifying and learning the emerging areas for study enabling to equip the skills with self reliance.

Keywords: Soft skills; Hard skills; Library and information professionals; Information and communication technology; Library and information centre

Invited Paper Paper Ref: ST-14/27

CHANGING THE ROLE OF LIS PROFESSIONALS IN TRANSFORMATION OF THE SOCIETY: STRATEGIES AND SKILLS TO ADOPT AND ATTAIN

S B Banerjee, Formerly Deputy Manager (Information), Hindusthan Paper Corporation Limited, Kolkata, West Bengal, Guest faculty of VU, CU, KU & B Schools & Academic Counsellor, IGNOU, sbbanerjee1933@gmail.com

Purpose: Libraries of various nomenclatures grew with the growth of the Society. The inherent thirst for knowledge in man in all ages sequelled its unstopped growth. In these days of diversities and multidirectional activities in the society entailing knowledge economy, the libraries have become indispensable key centres to cater equitable and 'Just in time' (JIT) information/knowledge. Rapid advancement of information and communication technology (ICT) wooingly reshaping the society, has also been bringing a compelling situation "to have a close connectivity between knowledge, innovation and collaboration" for navigating to all sectors of the economy. Ideation, innovation, creation, dissemination and consumption of knowledge with astounding care has become a must.

Librarians, today, are to play distinctive roles to complement and support the activities of the planners, administrators, decision makers, scientists, technologists, academicians, researchers, legal and other key professionals besides largely the communities. While technology thwacked society has been longing for the crucial library services, loud talks for its nonuse are rampant. In this context LIS professionals are to adopt new strategies to effectively rise to the situation to serve the society best and to attain proficiency, in both hard and soft skills, the metonyms of competence, competency and personal effectiveness.

This paper aims to highlight how the Libraries are to act factually for transformation of the society, how the LIS professionals are to deal with the situation and what strategies, techniques and skills they are to adopt and pursue.

Methodology: The paper is based mostly on the views expressed in professional, seminars, conferences, symposiums etc and occasional informal discussions with information seekers and consumers.

Findings: Informal interactions with expressed and potential information consumers brought out the indications of latent and unexpressed unwillingness to use library services, though compulsion to use information is in the high ladder.

Value: Libraries/information centres being the service units, quality performance of the LIS professionals, their expertise capabilities and excellences, in soft skills, in addition to hard skills or competence need be ushered in. To bring forth the elements and indicators of strategies and soft skills, they are to go in for new steps.

Products are manufactured, services are performed; while quality of products is visible, quality of performance can only be felt. To ensure quality of performance, LIS professionals, are to adopt strategies and skills, discussed in this paper, to help eradicate the apathies to use library services creating better image and its indispensability as well.

Keywords: Library; Information centre; Information and communication technology; ICT; LIS professional; Changing role

Paper Ref: ST-14/4

SKILL DEVELOPMENT PROGRAMMES AMONG LIBRARY PROFESSIONALS RENDERING EFFECTIVE SERVICES TO THE USERS IN AN ENGINEERING COLLEGE LIBRARY IN THE CHANGING SCENARIO: A CASE STUDY

Subhra Banerjee, Assistant Librarian, Heritage Institute of Technology, Kolkata, West Bengal, subhra.banerjee@heritageit.edu

Binod Bihari Das, Former Chief Librarian, Jadavpur University and Library Advisor, Heritage Institute of Technology, Kolkata, West Bengal, binodbihari.das@heritageit.edu

Moumita Ash, Librarian, Vidyasagar College for Women, Kolkata, West Bengal, ashmoumita@gmail.com

Purpose: The main purpose of this paper is to assess the usage of the resources of a college library through its various services provided by the library professionals who are being equipped through various skill development programmes. The Heritage Institute of Technology, Kolkata (HITK) library is treated as a sample for case study.

Methodology: All the data relating to HITK library have been collected from the HITK Newsletters, library records, Publications i.e. Know Your Library and HITK Library –a brief profile. Survey method also has been adopted through the feedback system from the users.

Findings: This paper deals with the various skill development programmes of the library professionals of Heritage Institute of Technology (HITK) and the increase of usage of the library, development of its services, better utilization of its resources, its discipline and ambience with good organization of resources, its team work and positive attitude of the library professionals. The various skill development programmes have been arranged for the staff members in HITK library; viz. ,six Computer training programmes; 18 Seminars/Conferences attended by library professionals; acted as Resource persons in Seminar/Refresher and Orientation courses; presenting papers in National seminars; organising seminars/workshops on D-space, Koha and Libsys etc. Each library professionals has been engaged in imparting training to the new entrants on searching OPAC/WEB-OPAC, Institutional Repository and other e-resources in the Digital Library. Through these programmes the library professionals are acquiring competence and confidence in their work. On the other side, the library activities and newer services are publicized and popularized; as a result, the usage of library services has been increased from 350 students /per day in 2006 to 1110 students /per day in 2018 in HITK library along with its digital library. The print and e-collections of the HITK library have been developed within these twelve years. The development of collection, introduction of newer services and skill developments programmes for staff members i.e. equipped personnel have great impact on the popularity and usage of library services.

Originality: This study is an original work as this deals with primary data of the Heritage Institute of Technology, Kolkata (HITK) library relating to its skill development programmes, services and usage.

Keywords: Skill development programmes; HITK library - collections and services; HITK digital library

ATTITUDE AND SKILLS ON WEB 2.0 TECHNOLOGY AMONG LIBRARY PROFESSIONALS : A STUDY ON CHMK LIBRARY, UNIVERSITY OF CALICUT, KERALA

K G Sudhier, Assistant Professor, Department of Library & Information Science, Central University of Tamil Nadu, Thiruvarur, Tamil Nadu, kgsudhier@cutn.ac.in

ST Seena, Cataloguer, High Court of Kerala, Kochi, Ernakulam, Kerala, seenast@gmail.com

Purpose: This paper investigates the attitude and skills of web 2.0 technology tools by library professionals in the CHMK library, University of Calicut, Kerala. The web has transformed the ways by which people search, find, use and communicate information. Web 2.0 application tools are the effective and interactive platform which in involves users in the development of the library services. It facilitate interactive information sharing, interoperability, user centered design, dynamic content, openness, and user participation.

The main objective of the study was to find out professionals' attitude and skills regarding integration of web 2.0 technologies in library operations and services.

Methodology: A survey based questionnaire method was used to collect data. The respondents chosen for the study consists of librarians, deputy librarians, assistant librarians, and library assistants in the university library. Total 65 questionnaires were distributed to the professionals and 58 were collected and analyzed.

Findings: The study revealed that university library professionals were mostly familiar with web 2.0 tools such as social networking sites (face book, twitter, etc.), blogs, instant messaging and wikis. Analysis also showed that the library professionals have a positive attitude towards the implementation of web 2.0 technologies in libraries. The paper concludes with the suggestions that adequate funds should be made available by the authorities for developments of ICT infrastructure and application of web 2.0 technology enabled services in university library. Finally, power failure, lack of facilities such as computers with internet access, lack of time and lack of interest were mentioned by the librarians as some of the challenges in using web 2.0 tools.

Originality: This is a pioneer study to identify the attitude and skills on web 2.0 technology applications in the CHMK library of the university of Calicut. The outcome of the study would be useful for the university library professionals and the authorities to provide better service with the emerging technology applications. To explore the factors affecting the applications of web 2.0 technologies in university libraries in the region, a comprehensive study should be conducted by including more universities.

Keywords: Web 2.0; Attitude; Skills; Library professionals; CHMK library; University of Calicut; Kerala

JOB DIARY AS A MODULE OF LIS EDUCATION FOR SKILL DEVELOPMENT WITH REFERENCE TO THE LIS EDUCATION IN ASSAM

Nirmal Ranjan Mazumdar, Librarian, Pub Kamrup College, Baihata Chariali, Assam, nrmazumdar@gmail.com **Dipen Deka,** Assistant Professor, Department of Library & Information Science, Gauhati University, Guwahati, Assam, dipendeka@gauhati.ac.in

Sanjay Kumar Singh, Professor & Head, Department of Library & Information Science, Gauhati University, Guwahati, Assam, sksgu1@gauhati.ac.in

Purpose: The Library and Information Science (LIS) is a skilled based profession. Without acquiring basic skill and competency, a better and a new age Library and Information services cannot be assured. Therefore, the LIS schools are always emphasizing on providing some practice based educations and trainings so that, a LIS graduate can be a good professional with self-confidence. During the LIS education basically theoretical aspects are given more emphasis in comparison to practical aspects. In BLISc/MLISc programme of LIS curriculum, a paper with evaluation and gradation is included in a few LIS schools which is purely practice oriented in nature and is named as 'Job Diary'. The basic purpose of this study is to highlight the scope of 'Job Diary' in LIS schools in Assam in general and its related issues in particular.

Methodology: LIS education in Assam has a glorious history as it has completed fifty years in 2016. Till date there are four universities in Assam where bachelor and master programme in LIS are offered in regular mode. The only state Open University in Assam has also the provision of LIS education and it provides diploma level course only. This study is based on those four universities of Assam where LIS education is being provided in regular mode. A survey has been conducted and the syllabus of those universities is being analyzed as per the purpose of this study.

Findings: Job Diary is a self prepared manual by a student on the basis of the practical experiences gathered while working in a library for a short period preferably one week to two weeks. In this process, LIS students are deputed in groups to some selected developed/modern libraries/library and information centers and the students work under the guidance of the librarian of those particular libraries to have practical exposures of library management. After completion of the period, students prepare a manual which can be helpful in their professional career. They are evaluated on the basis of their performance as well as their 'Job Diary'. The study reveals that LIS education in Assam has the provision of the 'Job Diary' and the students are mandatorily deputed in various institutions for this purpose.

Value: This paper proposes a model which can be implemented for conducting 'Job Diary' by a particular library. The paper suggests for implementation 'Job Diary' in the course curriculum of all LIS schools of our country.

Keywords: Library and Information Science; LIS education; LIS education-Assam; Job diary; LIS schools; Curriculum; Skill development

IS LIBRARY AND INFORMATION SCIENCE A PROFESSIONAL COURSE?

Sanjay Kumar Singh, Professor and Head, Department of Library & Information Science, Gauhati University, Guwahati, Assam, sksgu1@gauhati.ac.in

Prasanta Kumar Deka, Librarian (Associate), K C Das Commerce College, Guwahati, Assam, dekapk@gmail.com

Purpose: Library and Information Science is said as a professional, interdisciplinary/ multidisciplinary, research and job oriented course which provides better job opportunities to the degree holders in libraries of government, public and private organizations, archives, museums, mass media, information centers, IT sectors, etc at local, regional, national and international levels. In general degrees like BA, BSc, BCom, MA, MSc, MCom etc are termed as academic qualifications whereas professional degrees like BBA, BCA, BCJ, MBBS, BE,, BTech, LLB, MBA, MCA, MCJ, MD, MS, MTech, LLM, etc are referred to as professional qualifications as it decides the profession of the person for his/her career.

There is always a debate on "whether Library and Information Science (LIS) is a professional course or not". Somebody say it is a professional and somebody says it is not a professional course. Even the UGC is silent in this regard. So far we think up to 2005-06 UGC web page was showing a list of qualified JRF/NET SC/ST candidates whose names were in the list of professional courses where Library and Information Science was shown as Professional Course. But due to unknown reason the name of Library and Information Science was removed from the list of professional courses in 2006 and since then nothing has been done for its inclusion in professional course by the UGC. The library associations at national level can take the initiative to include the LIS course in the list of professional courses; and also include this as a subject in civil service examinations i.e. UPSC and State Public Service Commission. By doing so, it will certainly enhance the quality of our profession. Earlier students were opting this course accidently but today the scenario is completely changed, rather students are choosing this course as first preference also. So, the main purpose of this study is to know about 'whether library and information science is a professional course or not'. What may be the probable reasons for withdrawing LIS from the UGC list? Why we are silent regarding this matter? Theoretically/verbally we say that LIS is a professional course, but in writing there is no supportive document. What benefits the LIS professionals will get if it will be declared as professional course by the competent authority?

Methodology: For writing this paper the observation methods and personal interview methods are applied to have some idea along with discussions with some of the budding LIS professionals to access their views in this regard are also taken into consideration. Macro and micro literatures are consulted to know the status of professional courses. Other related documents about the non inclusion of LIS as professional course are also assessed.

Findings: Library and Information Science as a profession is full of people passionate about making a constructive change in the world, and they tend to be passionately happy about what they do. Librarians bridge the gaps of digital divide which exist between people, information and modern technology. Young librarians are always eager to do something new for the development of profession. In this regard the emerging professionals are found to be busy in designing and developing knowledge-organization systems; creating reader's advisory resources to encourage young students to develop a lifelong love of reading and learning; helping scholars to locate archival and other resources; guiding doctors to locate health related information; and so on. By including LIS in the list of professional courses there will be more demand of this course in future. In many states it is considered as job oriented course.

Value: This is an attempt to highlight and explore the various pros and cons regarding the question 'whether library and information science is a professional course or not'. The outcome of this paper will be very much useful to all LIS professional in coming days. The paper also minutely discusses other areas related to professional courses, which will be also helpful for all.

Keywords: LIS; Library and Information Science; Professional course; BLISc; MLISc

SIG 01: SOCIAL SCIENCE INFORMATION

Theme: Performance Appraisal of Libraries/Information Centres

Invited Paper Paper Ref: SIG01/24

A FRAMEWORK FOR PERFORMANCE EVALUATION OF LIBRARIES/ INFORMATION CENTRES IN INDIA

Amitabha Chatterjee, Retired Professor, Department of Library & Information Science, Jadavpur University, Kolkata, West Bengal, chatterjeeamitabha@yahoo.co.in

Purpose: We often hear people expressing displeasure with their libraries as they are not satisfied with the services provided by them. Such experiences by users undoubtedly result in drop in footfall in libraries. To avoid such situation it is necessary to develop a mechanism of periodic performance evaluation in every library. Performance evaluation tries to compare 'what is' with 'what ought to be'. In the context of libraries/information centres performance evaluation should aim at finding the current situation and then assessing how far the library/information centre is able to satisfy the objectives/goals/missions of the library/ information centre concerned.

The purpose of the paper is to develop a theoretical framework suitable for performance evaluation of libraries/information centres in our country.

Approach: The available literature on the theory and practice of performance evaluation, specially in the context of libraries/information centres, have been studied; hindrances in implementing a performance evaluation policy, specially in a developing country like ours, have been identified; and based on the same a workable methodology of performance evaluation of libraries/information centres has been suggested. Since evaluation criteria and performance indicators are vital for effective performance evaluation work, effort has also been made to find such criteria and indictors which may be relevant for evaluating libraries/information centres.

Value: Implementation of the suggested methodology to evaluate the performance of a library/information centre is likely to bring out the weaknesses and shortcomings of the library/information centre and thereby help in improving the services rendered by it and thus arrest the decreasing footfall of users and justify the investment made to run the library/information centre. However, we cannot overrule the limitations. The suggested methodology has not been tested. Such testing is necessary in different types of libraries/information centres – national libraries/information centres, public/community libraries/information centres, academic libraries/information centres, special libraries/information centres – and the results/feedback received should be used to further refine the same

Keywords: Performance evaluation; Performance evaluation of libraries; Performance evaluation of Information Centres; Performance evaluation framework; Performance evaluation methodology; Performance evaluation criteria; Performance indicators

Invited Paper Paper Ref: SIG01/26

ACCREDITATION: THE BENCHMARK OF EXCELLENCE FOR INDIAN HIGHER EDUCATIONAL INSTITUTES WITH SPECIAL EMPHASIS TO LIBRARIES

Nitai Raychoudhury, Librarian, City College, Kolkata, West Bengal, raychoudhuryn@gmail.com

Purpose: The key to harnessing India's demographic dividend is education. India's higher education system is the third largest in the world, next to the United States and China. Higher Education sector of India has witnessed a tremendous increase in the number of universities and colleges since independence. Higher Education Institutions (HEI) management is now demanding a more efficient use of scarce resource, and this leads to an urgent requirement for new management methods such as performance measurement based on performance indicators for all areas of the library. The Indian Library and Information Service (LIS) professionals engaged in HEI are now facing minor or major decision-making on quality management issues. Therefore, a need for guidelines, self-appraisal tools, real-world experience, etc. has emerged.

The higher education system in India is currently faced with many issues of concern relating to the accountability and quality assessment. HEI libraries are now being pressed for greater accountability and improved attention to quality so that they can provide meaningful support services to achieve quality in teaching, research and extension activities. Under these circumstances, the paper portrays the roles played by various statutory bodies in assessing the performances of HEI libraries. The study provides a clear view of the current State-of-the-Art of accreditation process of higher education institutions in India.

Approach: Accreditation is the way through which higher education institutions broadcast the quality of their educational processes to their stake holders, including students, parents, recruiters, alumni, staff and management and governing body. Before embarking on a path of improvement in quality, a higher education institution must know where it stands and what its strengths and weakness are. In India, quality enhancement of higher education is achieved in two ways –i) Higher Education Institute undertakes self assessment procedure to judge its activities and services, ii) Accreditation by well-structured external agencies by means of Strength, Weaknesses, Opportunity and Challenges (SWOC) analysis and rating it on a pre-defined scale. It is proposed that HEI libraries' quality assurance approach should be supported by a meaningful and comprehensive benchmark on quality indicators which needs to be developed to measure all aspects of library operations keeping in mind the multi-dimensionality of differences that persists among HEI libraries in India.

Findings: In India, accreditation for various disciplines of higher learning is overseen by respective autonomous body established by the enactment of Act. The present paper begins with the accreditation process of these national agencies, highlighting their governance, role and functions. The article has also portrayed the responsibility of international accreditation agencies in a global environment. Special emphasis has been given to identify the basic parameters of performance analysis of learning resource centres of the higher educational institutes with their status.

Originality: The accreditation of HEI will support the stakeholders and patrons responsible for achieving the aims and goals of the institute by identifying the strength and weakness in terms of infrastructure, services and other areas of present day demand of the knowledge society. The study provides potential input to self-examine the status of individual institute by collaborating different parameters and act accordingly. The HEI institutes may use this benchmark of excellence to better understand and compare the performance levels of different library systems in India. It helps higher education institutions to market their programmes nationally and internationally and promote as one of the premier and essential organ of the Higher Education System in India.

Keywords: Higher education; Accreditation process; Higher Education Institutes; HEI; Quality assurance; India

SIG 02: COMPUTER APPLICATIONS IN LIS

Theme: Digital Archiving

Paper Ref: SIG02/32

REPOSITORY OF BANARASI SAREE DESIGNS : TECHNIQUES TO PRESERVE ITS HERITAGE

Mohd Shoaib Ansari, Librarian, Government Kaktiya Post Graduate College, Jagdalpur (Bastar) Chhattisgarh, akhtarshoaib323@gmail.com

Aditya Tripathi, Professor, Department of Library & Information Science, Banaras Hindu University, Varanasi, Uttar Pradesh, aditya@bhu.ac.in

Sneha Tripathi, Deputy Librarian, Sayajirao Gaekawad Library, Banaras Hindu University, Varanasi, Uttar Pradesh, sneha.tripathi@gmail.com

Purpose: Preserving the cultural, historical and scientific heritage of civilization is very important for humanity. Every generation is aimed at keeping its cultural artefacts so that it could be revised and studied by the next generations. The contemporary information communication technologies have made possible the availability of digital content on a global scale and the strong demand for users who are now online. This paper aims to propose a model for cultural object repository as a modern technological solution for the preservation of Banarasi designs and cultural heritage.

Methodology: Traditional Banarasi saree designs are influenced by Persian art with a combination of Indian traditional art. These designs are composed of gold patterning on a silk ground. Most of the sources available for tracking the development of designs of Banarasi sarees are manuscripts, paintings, and old handmade design collections. The present work would help in the preservation of various designs and demonstrated the level of competencies of artisans. A study has been made to understand the work involved in the preparation of Banarasi Saree. It was advantageous for the authors as one of the contributors belongs to the community involved weaving of the Banarasi Saree industry. The work has attempted to propose a model for creating a cultural object repository. The theoretical aspect has been discussed to understand the concept and the model has been developed using PHP coding. The Apache server and MySql database have been used as the underlying technology.

Findings: A model for repository has been developed to preserve the traditional Banarasi saree designs. The model enables preservation and access to the designs and patterns. The systems is a web-based information retrieval system enabling search through a web browser. The system stores designs along with the metadata. Further, the images of products with the design is also included with each record.

Originality: This paper tried to review the possibility to develop a model for the preservation of traditional Banarasi saree designs. A repository has been created for uploading raw designs and final designs woven over sarees. The repository is also enriched with metadata and keywords.

Keywords: Cultural preservation; Institutional repository; Cultural object repository; Digital preservation; Information system

AUTHOR INDEX

AUTHOR(S)	PAPER REFERENCE	PAGE NO
Ansari, Mohd Shoaib	SIG02/32	38
Anupama A	ST-6/20	17
Ash, Moumita	ST-7/30, ST-14/4	19, 32
Baba, Abdul Majid	ST-13/25	29
Banerjee, S B	ST-14/27	31
Banerjee, Subhra	ST-14/4	32
Biju, V V	ST-3/18	11
Biswas, Ashis	ST-8/8	21
Chatterjee, Amitabha	SIG01/24	36
Chelatayakkot, Veerankutty	ST-10/1	25
Cherukodan, Surendran	ST-5/31	14
Cherukulath, Wilson K	ST-3/3	9
Das, Binod Behari	ST-14/4	32
Das Biswas, Mayuri	ST-12/12	27
Das, Rajib Kumar	ST-9/9	23
Deka, Dipen	ST-14/34	34
Deka, Prasanta Kumar	ST-14/35	35
Doshi, Purvi	ST-4/13	12
Gajbe, Sagar	ST-10/33	24
Geetha, P	ST-3/3	9
Gopakumar V	ST-6/37	15
Jayasree V	ST-6/23	18
John, Binu P	ST-3/3	9
Jose, Sanjo	ST-3/18	11
Kabir, S Humayoon	ST-5/31	14
Karmakar, Gouri S	ST-3/6	10
Krishna Priya V	ST-3/5	10
Lahkar, Narendra	ST-14/28	30
Madalli, Devika P	ST-10/33	24

Maharaj, Nisha G	ST-4/13	12
Majumder, Apurba J	ST-3/6	10
Mazumdar, Nirmal Ranjan	ST-14/34	34
Mercy Lydia, D	ST-3/5	10
Mohanan, Aparna	ST-6/20	17
Munigal, Achala	ST-8/15	22
Neelankavil, John	ST-1/2	7
Nidhisha P K	ST-8/17	23
Panigrahi, Pijushkanti	ST-7/30, ST-12/12	19, 27
Prakash, E R	ST-12/21	28
Prasad, AR D	ST-11/36	26
Rajalekshmi R	ST-4/22	13
Ratheesh K	ST-6/23	18
Raychoudhury, Nitai	SIG01/26	37
Saha, Biswajit	ST-6/7	15
Sarangapani, R	ST-6/16, ST-8/17	16, 23
Satpathi, J N	ST-3/38	8
Seena, S T	ST-14/10	33
Senapati, Susanta K	ST-8/29	20
Shah, Chetana	ST-4/13	12
Shreekala P K	ST-4/22	13
Singh, Sanjay Kumar	ST-14/34, ST-14/35	34, 35
Singha, Anuradha	ST-9/9	23
Sornam, S Ally	ST-1/2	7
Sreeja N K	ST-6/20	17
Stephen T	ST-3/5	10
Sudhier, K G	ST-14/10	33
Tiwari, Amit	ST-10/33	24
Tripathi, Aditya	SIG02/32	38
Tripathi, Sneha	SIG02/32	38
Vishakha	ST-6/16	16
Waral, Nancy	ST-6/37	15

SOME OF THE PUBLICATIONS of IASLIC Conference / Seminar Proceedings

1				
	1.	LIS Education in India: Current Scenario and Future Strategies;	_	
	_	IASLIC 28th National Seminar 2018, Viswa Bharati, West Bengal	Rs.	490
	2.	Public Libraries in India in 21st Century; IASLIC 31st All India Conference 2017, Varanasi, Uttarpradesh	Rs.	490
	3.	Social Networking and Libraries;	113.	430
	0.	IASLIC 27th National Seminar 2016, Raipur, Chhattisgarh	Rs.	490
	4.	Library Legislation and Community Information Services;		
		IASLIC 30th All India Conference 2015, Ahmedabad	Rs.	490
	5.	Roadmap to Usher in Knowledge Society;		
		IASLIC 26th National Seminar 2014, Guwahati, Assam	Rs.	490
	6.	Role of Library Associations in India;	_	400
	_	IASLIC 29th All India Conference 2013, Pune, Maharastra	Rs.	490
	7.	Intellectual Property Rights: Problems & Prospects with Special Reference to Library & Information Services, IASLIC 25th National Seminar 2012, Puducherry	Rs.	490
	8.	Library Vision 2020; IASLIC 28th All India Conference, 2011, Srinagar	Rs.	490
	9.	Reading Habits in Changing Scenario & LIS Education : Emerging Paradigm,	113.	430
	٥.	Challenges and Vision; IASLIC 24th National Seminar 2010, Gorakhpur	Rs.	490
	10.	Library / Information users in Digital Era;		
		IASLIC XXVII All India Conference 2009, Bhubaneswar	Rs.	800
	11.	Library / Profession in Search of a new Paradigm;		
		IASLIC XXIII National Seminar 2008, Kolkata	Rs.	1200
	12.	Digital Media and Library Information Services;	_	
	40	IASLIC XXVI All India Conference 2007, New Delhi	Rs.	1200
	13.	Open Source Movement-Asian Perspective; IASLIC XXII National	Do	1000
	14.	Seminar 2006, Roorkee LIS Profession in India: Vision for 2010; IASLIC 25th All India	KS.	1000
	14.	Conference 2005, Chennai	Rs	1000
	15.	Information Support for Rural Development; IASLIC 21st National		.000
		Seminar 2004, Kolkata	Rs.	1000
	16.	Knowledge Management in Special Libraries in Digital Environment;		
		IASLIC 24th All India Conference 2003, Dehradun	Rs.	800
	17.	Digital Information Systems & Services; IASLIC 20th National	_	
		Seminar 2002, Patiala	Rs.	600
	1.	Indian Library Science Abstracts (ILSA), 2006-2010, Edited by		
	١.	Prof Juran Krishna Sarkhel	Rs	2500
	2.	Sixty One Years of 'IASLIC Bulletin': A cumulative Inded. Edited by Prof Arjun Das Gupta	_	
	3.	Dynamics of Planning & Marketing of Modern Libraries and Information Centres in an		
		Information Technology-based Environment by S Seetharama	Rs.	480
	4.	Indian National Library: Yesterday-Today-Tomorrow		
		by J N Satpathi and P N Venkatachary	Rs.	300
	5.	LIS Profession in the Changing Environment: Prof Prabir Roychowdhury	D -	400
		Memorial Volume. Edited by Prof. Arjun Dasgupta	Rs.	400

To place your order Demand Draft / Multicity Cheque is to be made in favour of IASLIC payable at Kolkata.

IASLIC 31ST ALL INDIA CONFERENCE 2017

Proceedings and Papers

Public Libraries in India in 21st Century

Rs. 490.00

IASLIC 28TH NATIONAL SEMINAR 2018

Proceedings and Papers

LIS Education in India: Current Scenario and Future Strategies

Rs. 490.00

SIXTY ONE YEARS OF 'IASLIC BULLETIN': A Cumulative Index, 1956 – 2016

Edited by Dr. Arjun Dasgupta Compiled by Dr. Tridib Chattopadhyay & Ms Moumita Ash

ISBN :- 978-81-907777-4-2

Rs. 490.00

Published by:

General Secretary, Indian Association of Special Libraries and Information Centres (IASLIC) P-291, CIT Scheme No. 6M, Kankurgachi, Kolkata 700054

Printer: MODERN GRAPHICA