

Developing Smart Libraries
Changes Challenges
Issues & Strategies

Developing Smart Libraries

Changes Challenges

Issues & Strategies

EDITORS

Dr. Abdul Majid Baba

Central University of Kashmir, Jammu & Kashmir

Dr. Raj Kumar Bhardwaj

St.Stephen's College, University of Delhi, Delhi

Dr. S.S. Dhaka

Ministry of External Affairs, New Delhi

Dr. Tariq Ashraf

University of Delhi South Campus, New Delhi

Dr. Nabi Hasan

IIT Delhi, New Delhi



The Power of Many
The Power of Partnerships

Asian Library Association
New Delhi

Published in August 2018

ISBN: 978-81-9348-251-3

© Asian Library Association, New Delhi.

Published by

General Secretary

Asian Library Association

Flat No. 392, Plot No. 3A, Naval Technical Officers Group Housing Society

Sector 22, Dwarka, New Delhi-110075

Email: asianlibraryassociation@gmail.com Website: www.asiala.co.in

Price: Rs. 1500/ Abroad: \$ 50

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means without the prior written permission of the publisher.

Disclaimer: Every effort has been made to ensure the originality of contents in the book. Neither the editors nor the publisher shall be liable for plagiarism, if reported in any of the papers. Authors of the respective papers shall be solely responsible for any similarity of the contents.

ABOUT THE EDITORS

Dr. Abdul Majid Baba holds Ph.D. and M.Phil in the field of Library and Information Science. He is the first person from the state of Jammu and Kashmir to qualify UGC-NET examination in the field of Library and Information Science in 1986 (First Batch) and also the first person to be awarded Research Degree in the field of Library and Information Science from Delhi University. Before joining the Central University of Kashmir as University Librarian, Dr. Baba has served the University of Kashmir in various capacities like University Librarian, AllamaIqbal Library (Central Library), Head Post Graduate Department of Library & Information Science and University Administrator. He is also approved guide for M.Phil/ Ph.D. scholars of Library and Information Science. He is an expert member of several state / National / International bodies. Due to his administrative, academic and teaching skills, Dr. Baba was nominated by the Jammu and Kashmir Government in drafting the J &K Public Library Act. Besides, he is the Governing Body Member of Indian Association of Special Libraries and Information Centres (IASLIC), Kolkata and ex-Vice President Indian Library Association (ILA), New Delhi. Further, University Grants Commission (UGC) nominated him as an expert member for Post-Doctoral Fellowship (PDF), Emeritus Fellowship and Special Assistance Programme (SAP) in the field of Library and Information Science in India. Dr. Baba has authored four books and published a large number of papers in national and international publications. For his outstanding services, he is also bestowed with Bharat Excellence Award by Friendship Forum of India, New Delhi. He has visited almost entire India and many other countries.

Dr. Raj Kumar Bhardwaj is a Librarian at St. Stephen's College, University of Delhi (India). Prior to his current position, he has served as Deputy Librarian at Nalanda University and Judges Library, High Court of Punjab and Haryana, Chandigarh. He holds MCA, MLIS, and M.Phil, Ph.D. from the University of Delhi. He has also qualified UGC-NET. He has published 4 books, 36 research papers in various reputed journals published by Emerald Publishing, Taylor & Francis, Cambridge University Press, Phcog.Net, DRDO, 3 conference papers, published 2 book reviews and has delivered several invited talks at various seminars and international conferences. He has completed two major research projects and a regular reviewer for five international LIS journals of repute. He is the recipient of UNESCO fellowship for Information Management and prestigious Commonwealth Professional Fellowship, United Kingdom. Dr. Bhardwaj has developed an online legal information system, accessible at: <http://www.olisindia.in>. His areas of interests are institutional repositories, evaluation of information systems, legal information system, open access, legal and legislative metadata, e-learning, social media analytics, text mining, scientometrics, semantic web and digital library development. Dr. Raj Kumar Bhardwaj can be contacted at: raajchd@gmail.com

Dr. S.S.Dhaka obtained M.A. in Political Science from Jawaharlal Nehru University in 1983, M.L.I.Sc in 1988 and Ph.D. in Library and Information Science in 2002 from University of Delhi. He started his professional career at National Museum of India, New Delhi as Assistant Librarian in 1988. Later, he joined Rajdhani College, University of Delhi as Librarian in December 1989. After working at Rajdhani College for 17 years, he was appointed Director (Library & Information) in Ministry of External Affairs, New Delhi in 2007. He is a visiting faculty at MeeraBai Polytechnic, Department of Technical Education, and Government of NCT of Delhi. He is a life member of Indian Library Association (ILA), Delhi Library Association (DLA), IASLIC, MALIBNET, Special Library Association (USA) and Delhi Mountaineering Association. Dr. Dhaka visited several countries in Asia, Africa, America and Europe. He has got published several papers in national and international journals and three books to his credit. He attended several national and international conferences held in India and abroad and actively participated in IFLA activities. He was elected Chair of IFLA Government Information & Official Publication Section (GIOPS) during 2011-15. Dr. Dhaka is founder President of Asian Library Association. He is also elected President of SLA Asian Chapter during 2016-17.

Dr. Tariq Ashraf obtained Master degree in Political Science from Hindu College, University of Delhi and PG and Doctoral degrees in Library & Information Science from Department of Library & Information Science, University of Delhi. Dr. Ashraf carries more than 25 years of rich and varied experience of working with India's leading institutions. Currently, he is with University of Delhi and is heading the South Campus Library of University of Delhi for nearly 10 years and has earlier worked at Indian Institute of Management, Lucknow, IILM, and Centre for Policy Research, New Delhi. He is also visiting faculty at Department of Library Science, JamiaMilliaIslamia and a member of its Board of Studies. Dr. Ashraf has contributed nearly 30 articles and research papers to various national and international journals and has published 8 books. He has recently contributed 8 modules to E-PG Pathshala, an online learning programme of UGC. He has delivered talks and conducted sessions on information systems, management, and policies at various national and international forums. He has been a member of Editorial Boards of several prestigious publications and currently editor of Journal of Library Management, New Delhi. Dr. Ashraf is a twice winner of an international paper contest held by Association for Information Science and Technology (ASIST) in the year 2003 & 2009. He is also the recipient of Distinguished Member award of Special Library Association in the year 2013. Dr. Ashraf has been a board member of SLA-Asian Chapter and is treasurer of Asian Library Association, member of editorial board of Association for Information Science & Technology, USA and a long time consultant with the US-based consulting firm, Gerson Lehrman Group (GLG). Dr. Ashraf has traveled to USA, Japan, UAE, Singapore, Hong Kong, Philippines, Germany, Italy, South Korea, Poland, and Malaysia on various professional grants.

Dr. Nabi Hasan is working as a Librarian at Central Library, Indian Institute of Technology Delhi (IITD). Prior to this, he has served as the University Librarian of Aligarh Muslim University (AMU). He has also served earlier as Deputy Librarian in the IITD during 2009-2016 and as Deputy Librarian/

Assistant Librarian and a Regular Post Graduate Faculty at Himachal Pradesh Agricultural University, Palampur (HP) during 1997-2009. "First Borlaug Fellow From India" in Library Information Systems at Cornell University, New York, USA: Dr. Hasan is the recipient of the many national and international awards and recognitions including "Vice-Chancellor Appreciation Award 2003", "Appreciation From The Chairman, Board Of Governors, IIT Delhi" in 2012, "Lifetime Achievement Award 2015" for Extraordinary Services and Dedication towards Library Science, Appreciations From The Vice-Chancellor of The Aligarh Muslim University 2018, etc. He has won the Bonnie Hilditch International Librarian Award 2018 USA, one of the most reputed professional awards for significant professional contributions by Special Libraries Association USA (SLA), presented during its Annual Conference during June 9-13, 2018, Baltimore, USA. Dr. Hasan has an experience of 23 years of active library services and postgraduate teaching. He has published 13 Books/composite Books and 125 papers/articles in reputed journals, conferences, composite books, etc. Dr. Hasan is currently the Treasurer-Elect 2018 Special Libraries Association (SLA-USA) - Asian Chapter and in the past also served as the Director of the association. He has also served as the Chair-Editorial Board, Asian Chapter - 2015 & 2016 and Member-Online Content Advisory Council – 2016. He is also the Vice-President -Indian Association of Special Libraries and Information Centres (IASLIC). More details about him are available at: <http://web.iitd.ac.in/~hasan>

Contents

Foreword	xv
Preface	xvii
Acknowledgement	xix
1. Assessment of Records Management in Registry Department of Kebbi State University of Science and Technology, Aliero, Nigeria Murtalaaminu and Salisu Adamu Aliero	1-8
2. Attitude of Higher Secondary Academic Staff towards E-Learning at Kashmir Valley: A Case Study/ Sanna Ahadi, Subreena Samad, Mudasir Ahmad, Syed Javed I. Kamili , Bilal A. Bhat	9-16
3. Significance of Traditional Knowledge Digital Library (TKDL) to Intellectual Property Rights in Protecting the Traditional Knowledge in India Sheeba Ahad and Gowsia Farooq	17-30
4. An Altmertic Analysis of the Research Outcome of Scientists at Defense Research and Development Organization Abu K.S., Nishat Fatima, Md. Ghulam Samdani	31-36
5. Enriching the World Culture: Contribution of Select Central Asian Countries to the World Digital Library/ Adil Ahmad, Razaqat Zehra and Nusrat Jabeen Khan	37-44
6. Strategies for Enhancing Sustainable Agricultural Development among Rural Farmers in Nigeria: Provision of Information Services Approach Ameh Godfrey Shaibu	45-54
7. Digital Repositories: Development, Preservation and Challenges Anuj Bali, Leela Dhari Sharma and Ajay Saini	55-64
8. Automation of College Libraries in Jammu Division: A Survey Anuradha Seth	65-76
9. Publication Productivity of 'E-Learning' by Scopus During 2003-2017 Amir Amanullah Sogam-Lolab	77-82
10. Growth and Performance of Open Access Journals in China and India Arshia Ayoub, Sameera Amin and Dr. Zahid Ashraf Wani	83-90
11. Use of Internet and Information Literacy Skills among Research Scholars: A Survey Asifa Ali, Masood Ahmad Bhat, Bilal Ahmad Bhat and Tasaduq Hussain Shah	91-100
12. Virtual Learning through MOOCs: An Exploratory Study Asifa Ali, Sumaira Jabeen, Irfan- ul -haq Akhoun and Shabir Ahmad Ganaie	101-108

13. Information Seeking Behaviour of Faculty Members at Amar Singh College, Cluster University Srinagar: A Survey
Asmat Ali 109-114
14. Reading Habits of Research Scholars of Central University of Kashmir: A Survey
Basharat Ahmad Wani, Haamid Amin Mir, Mohammad Idrees Khan, Towseef Ahmad Bhat and Muzzaffar Jan 115-124
15. Users Rating to Print and e-Resources at Engineering College Libraries in Hyderabad: A Study
Bharata Laxmi Devi 125-134
16. Effect of Social Media on Academic Performance of Students Studying in Higher Educational Institutions in Kashmir: A Study
Bilal A.Bhat, S.N.Z.Geelani, Bilqees Anjum, Asifa Ali, Waqar -Ul Nisa and Saima Farooq 135-144
17. Digital Libraries Development, Architecture and Management: Issues and Challenges/**Bilal Ahmad Dar, Shabir Ahmad and Mohd. Basharat** 145-154
18. MOOCs: A Case Study of the SWAYAM Platform
Bisma Bashir and Fayaz Ahmad Loan 155-162
19. Skills and Competencies of LIS Professionals in the Changing Scenario
Bobby Goswami Baruah 163-176
20. Virtual Learning Environment: Using MOODLE as a Blended Learning Approach for Teaching, Training and Research Institutions in India
D. S. Thakur 177-188
21. E-learning Portal for Effective Information Services in Agriculture
Deepa P K and Abdul Azeez T A 189-196
22. Project NPTEL: A Boon to Technical Education in India
Duha Mukhtar Kashtwari and Zahid Ashraf Wani 197-202
23. Understanding the Role of Social Media in Tourism and Hospitality: A Review
Faizan Ashraf Mir, Mudasir Ahmad Mir 203-216
24. Bibliotherapy and Mental Health: A Systematic Review on the Therapeutic Essence of Books Across Various Age Groups
Dr. Farooq Ahmad Rather, Ifat Rasheed and Suhail Ahmad Bhat 217-224
25. Integration of Technology in Education and the Changing Role of Teachers in India
Dr. Firdous Ahmad Sofal 225-232
26. Indian Media Libraries in Digital Age
Dr. G. A. Prasad Rao and Md. Gouse Riajuddin 233-238
27. Role of Librarians in Transition of Libraries from Conventional to Smart: A Strategic Approach/**Imran Khan** 239-246
28. Preserving Monumental wealth of Srinagar, J&K: A Digital Library
Irfan ul Haq Akhoun and Muneer Ahmad Bangroo, Sofi Gh Mohiuddin Jeelani and Nadim Akhter Khan 247-256
29. Tailoring Education for 21st Century Learners: Challenges for Educators
Ismail Thamarasseri 257-264

30. Internet of Things and its Application in Smart Library Setup: A Discussion Jayshri Mondal	265-270
31. Web 2.0 Applications in European National Libraries: A Content Analysis Kannikaparameshwari G. and Chandrashekara, M	271-278
32. Libraries as Social and Cultural Hubs: A Select Review Literature Review Kusum Lata Malik	279-288
33. Role of Libraries and Librarians in National Assessment and Accreditation Council Ranking of Colleges: A Case Study Leena Shah and Sudhir Kumar	289-296
34. Study of Information Seeking Behavior and Library Usage Pattern of Post Graduate Students in the University of Calicut Linsha M	297-304
35. Digital Library Activities in Bangladesh: A Study of Some Selected Private and Public University Libraries Md. Nazmul Islam, Md. Shariful Islam and Partha Biplob Roy	305-316
36. Library Automation system at International Islamic University Chittagong (IIUC) in Bangladesh: A Study Md. Nurul Islam and Md. Monirul Islam	317-330
37. Reflection of Indian Open Access Repositories in OpenDOAR: A Status Report Mohmmad Azim and Dr. Nabi Hasan	331-338
38. Usage of Library Resources by the Faculty Members of National Institute of Public Finance and Policy, New Delhi (India): A Study Mohd. Asif Khan and Navin Kumar Singh	339-354
39. Soft Skills and Competencies: Their Relevance in the Field of Library and Information Science Mohd Bashrat, Javed Ahmad Lone and Bilal Ahmad Dar	355-360
40. Attitude of Unani Medical Students Towards Digital Information Sources Mohd Iqbal Bhat, Javid Ahmed Lone and Ashaq Hussain Wafaye	361-370
41. Application of Management Techniques in Modern Librarianship with Special Emphasis on Human Relations School of Thought Mubashir Majid Baba	371-374
42. Gender Differences among Students in Accessing the Electronic Information Resources: A Case Study at University of Kashmir Mudasir Khazer, Shabir Ahmad Ganaie and Irfan-ul-Haq Akhoun	375-384
43. Accuracy of Search Tools in Counting the Search Hits: A Case Study of the Five Search Tools Mufazil Ali and Fayaz Ahmad Loan	385-390
44. Managing Modern Libraries in Digital Era: Issues and Challenges Nabina Qadir	391-396
45. Electronic Sources and Services in the Selected Indian University Libraries- A Comparative Study Nahida Nasreen and Fayaz Ahmad Loan	397-408

46. Data Migration in Koha Step by Step: A Case Study of National Institute of Financial Management Library
Nand Kishore Tailor, Vinod Kumar Jain, and Vinod Gautam 409-416
47. Digital Repositories in Technology- An Analytical Study
Nelofar Jan, Fayaz Ahmad Loan and Ufaira Yaseen 417-422
48. Usage and Impact of Social Media on Research Scholars at Babasaheb Bhimrao Ambedkar University, Lucknow, Uttar Pradesh (India): A Study
O. P. Saini and M.P. Singh 423-430
49. Impact of Social Media in Re-engineering the Libraries and Information Centre
Owais Ahmed 431-438
50. Core and Collaborative Research Productivity During 2006 to 2015: Case study of Delhi Technological University
Prabhat Kumar Choudhary and K. P. Singh 439-446
51. SWAYAM The Way of Learning with Special Reference among the Users of Central University of Punjab
Prachi Srivastava and Babita Yadav and Sharad Kumar Sonkar 447-452
52. Open Access Scholarly Publishing in the field of Social Sciences: A Critical Analysis of Directory of Open Access Journals
Prerna Singh 453-460
53. From Palm-Leaf Manuscripts to Digital Volumes: A Study on the Contribution of the Ancient Libraries in the making of Future Smart Libraries in the Asian Context with special reference to Thanjavur Maharaja Serfoji's Saraswathi Mahal Library, Tamil Nadu, India
R. Dharani 461-466
54. Mapping the Breast Cancer Research in India and Iran: A Scientometric Analysis
Rabiya Mushtaq and Fayaz Ahmad Loan 467-474
55. Most Discussed Research of 2017: An Altmetric Attention Score Analysis
Rosy Jan, Syed Ikhlauq ur Rehman and Shohar Bano 475-482
56. Student's Consciousness and Approach towards Cloud Computing Applications in Libraries at Kashmir Valley: A Students Perspective
S.N.Z.Geelani, Bilal A. Bhat, M.M.Kirmani, Samira Khan, Asifa Ali, Nusrat and Rahil Rafiq Rather 483-488
57. Impact of the Electronic Resources in Central Council of Research in Unani Medicine (CCRUM) & Central Council of Research in Homeopathy (CCRH): A Study
Sabah Jan 489-498
58. Role of Libraries as Social and Cultural Hubs
Saima Bashir and Shagufta Rehman 499-506
59. Management of Intellectual Property Rights for Data Protection in E-environment
Sanjay Bharti, V. K. Bharti and Dr. Pankaj Kumar 507-514
60. Digital Rights Management: An Essence for Library & Information Centers in Information Era
Shabir Ahmad and Khan Khaisar Munibulla 515-520

61. Research Information and Management Systems:
A New Service Category Enabling Collaborations through Connections
Shabir Ahmad and Sonal Singh 521-526
62. Multimedia and its Applications: A Special Reference to Library and Information
Centres
Shabir Hussain, Sumaira Jabeen, Irfan-ul-Haq, and Shabir Ahmad Ganaie 527-536
63. Research Sharing and Global Attention on the Social Web: Top Altmetric Articles
of 2017 in context
**Sheikh Shueb, Sumeer Gul, Tariq Ahmad Shah, Aabid Hussain,
Asiya Ahmed, Jahangeer Iqbal Qureshi, Rabia Shah and Mir Mubashir** 537-546
64. Measuring the Impact of Libraries on Students' Academic Performance at Higher
Education Institutes in Kashmir Valley: A Study
**Sidrat Ul Muntaha Anees, Bilal Ahmad Bhat, S. N. Z. Geelani
Syed Javed Iqbal Kamili and Asifa Ali** 547-554
65. Research Output of Indian Institute of Tropical Meteorology (IITM), Pune:
A Bibliometric Study
Shompa Das, Rahul Kute, Vineeta V. Sapre, Vijay H. Sasane and Rahul Kute 555-562
66. E-learning and Educational Consortium: Exploring Video-contents offered by CEC
consortium in the Field of Botany/**Showkat Ahmad Wani,
Duha Mukhtar Kashtwari and Zahid Ashraf wani** 563-578
67. Proposal for Designing New Library Building with Eco-friendly Initiative:
Issues and Opportunities
Sucheta Bhattacharjee and Sudip Bhattacharjee 579-582
68. Use of Information Sources by College Students in Jammu and Kashmir: A Survey
**Sumaira Jabeen, Asifa Ali, Irfan-ul-Haq Akhoun and
Shabir Ahmed Ganaie** 583-590
69. ARRS GoldMiner: A Medical Image Search Engine
**Sumeer Gul, Aabid Hussain, Sheikh Shueb, Muzamil Shafi
and Mahmood-ul-Aziz** 591-596
70. Practice and Awareness of IPR & Copyright Issues Related to Digital Resources
among the University Students: A Survey
Sutapa Chatterjee 597-604
71. E-Learning and E-Publishing: Trends, Challenges & Strategies
Syed Zahoor Ahmad Geelani, Irfan Bashir Mir and Mehraj Ud Din Bhat 605-614
72. Digital Library and Digital Rights Management in Digital Age
Syed Javed Iqbal Kamili 615-620
73. Changing Scenario of Trends in Library and Information Science Education and Research
Tanveer Rasheed Khan 621-628
74. Impact of School Library Services on Students' Performance: A Select Review of
Literature/**Tajamul Hassan Mir and Shabir Ahmad Ganaie** 629-636
75. Transformation of AgriKnowledge for Bringing Sustainability in Agriculture
through Mobile Application
V.K. Bharti, Kuldeep Chand, M.P. Singh and Sandeep Bharti 637-642

76. Digital Repository at a Research Institute: Development, Preservation and challenges :
A Case Study
Vineeta Sapre, Shompa Das and Girish Moghe 643-652
77. Smart Libraries in Smart Cities: Role of Libraries in Improving our Education System
Waqar ul Nisa 653-656
78. Impact of Smart Phone on Learning and Information Seeking Behaviour of
Postgraduate Students: A Case Study at University of Kashmir
**Zahid Ashraf Wani, Tazeem Zainab, Waseem Ahmad Malik,
Aijaz Ahmad Malik, Ishtiyag Zargar and Insha Majid** 657-664

SHORT PAPERS

1. Best Library Practices of Government Degree College Library Anantnag, Jammu and
Kashmir
Rafiq Ahmad Rather Arshad Hussain Bhat and Shabir Ahmad Rather 665-668
2. Relevance of Open Source Software in Modern Libraries: A Conceptual Framework
Iram Nazir Beigh and Saria Ibrahim 669-672
3. Use of Open Source Software in the Libraries
Madhu Shri Pandeya, Deepa Singhal, and Ratna Sharma 673-676
4. Scholarly Publishing: the Horrible Picture
Dr. Lalith Wickramanayake 677-678
5. MOOCs: Boon for Higher Education
Roli Misra 679-684
- Index** 685-688



Central University of Kashmir

Established Under Central Universities (Amendment) Act, 2009

July 12, 2018

Prof. Me'raj Ud Din Mir
Vice Chancellor



FOREWORD

It is an honour for all of us that we have been given an opportunity to organize 3rd International Conference of Asian Libraries at Central University of Kashmir.

I congratulate the Office bearers of Asian Library Association (ASIALA) New Delhi and staff of Central Library, Central University of Kashmir for publishing pre-conference proceedings. I am sure that the proceedings shall be of immense value for the overall development of Library Systems which play an important role in overall development of societies and academic setup. The use of modern gadgets in Libraries have facilitated the research work of faculty members, Scholars, students and others. But let me say that traditional printed book and e-book shall stay side by side for longer time.

I hope and anticipate that the discussions and deliberations during the conference shall be of great value.

Once again I congratulate the organisers of the conference, paper contributors and others for organising the conference.

I wish the conference a grand success.

(Prof. Me'raj Ud Din Mir)

Preface

The concept of smart libraries involves developing, transforming and repositioning libraries to innovate and strive for improvement. Smart libraries have transformative impact on users to operate according to high professional standards, ethical principles and values. These libraries, exemplify knowledge-based organizations, use research and data to build understanding, make decisions and decide the future, focus on laws, principles, ambiguity, uncertainty to create positive outcomes and constructive relationships. Smart Libraries must demonstrate efficiency and effective Economy in purchasing resources. Smart libraries require vision, values and goals, frameworks and evidence for service development, collection management, evaluation, and quality control. Smart libraries play a major role in the creation of networked and more sustainable communities. Smart Libraries in smart cities is need of an hour in all the countries particularly in India where smart cities concept is flourishing. The overall purpose of conference is to examine this transformational process into smart libraries and positioning the Library as a key player for sustained engagement and capability building of Library staff, Massive Open Online Courses (MOOCs) development team and learners, working in partnership with stakeholders to embed academic skills development within curriculum and developing high quality learning resources and tools that are interactive, engaging, collaborative.

As technology make a lasting impact on all sectors, people today expect to be able to find and access information from wherever they are. This makes challenges for the libraries and deeply impacted its structure – physically as well as conceptually. Because of this reason, most of the libraries across the country have increased the number of computers, onsite Wi-Fi to check out books to use inside the library. But in today's digital world simply focusing on increasing the number of system or space of the library is not sufficient. As we move forward into the digital age to continue the libraries must not only modernise their physical appearance but also their marketing and should take the advantage of new technologies. Like an ever-evolving smartphone technology, a smart library is constantly assessing to make the future a reality.

According to celebrated commentator Chip Weston “technologies that have been maturing over the last decades are no longer on the horizon but on our doorsteps. They are being deployed by the thousands and portend substantial changes in just about every aspect of our lives. Massive amounts of data are generated and self-learning, self-improving artificial intelligence is being used to not only make sense of the data but to leverage that information for good and nefarious purposes. Hundreds of new applications are discovered and come online every day in all fields of endeavour”¹.

1. Chip Weston http://www.libraryvision.org/smart_libraries_community_development_through_innovation_and_partnerships

While the convergence of different technologies makes it difficult to forecast the future, the sheer amount of digital data, when harnessed effectively, makes it possible to better read the needs of the local community, government, organizations and businesses. Libraries are often the ideal and in some cases, the only organizations that can best articulate and leverage these data-related opportunities.

According to observers key factors in the success of smart library programs are:

- Sustainable revenue
- Sharing best practices
- New governance models
- Measuring outcomes
- Crowd sourcing the untapped intelligence within each community
- A real-time local “dashboard” of relevant information
- Access to adequate broadband
- Adequate protection for privacy

The conference is jointly organized by Central University of Kashmir and Asian Library Association and 83 conference papers have been contributed by 150 young and experienced authors. An effort is being made to understand and to explore the issue of developing smart libraries in the face of fast changing concepts of scholarly communication, digital preservation, cyber infrastructure, information technology standards and specify the critical skills required to build and maintain smart libraries as resource centre and discuss how libraries can be attuned in the direction of achieving the goals of disseminating e-resources. In the process, the contributors also discuss as to how libraries have to go a large scale transformation to meet this challenge of digital environment and its accompanied implications. We are sure that readers will find the papers engaging and useful and valuable addition to the literature of Library and Information Science.

Dr. Abdul Majid Baba
Dr. Raj Kumar Bhardwaj
Dr. S.S.Dhaka
Dr. Tariq Ashraf
Dr. Nabi Hasan
(Editors)

Srinagar, August 1, 2018

Acknowledgements

The organizational process of 3rd International Conference of Asian Libraries, (ICAL) 2018 has drawn support from a large number of institutions, publishers, individuals, professional colleagues, staff members and large number of friends. It would not have been possible to hold the conference successfully without their generous and unstinted help, advice and acclaim at several critical moments. We express our sincere thanks to Prof. Me'rajUd Din Mir, Hon'ble Vice Chancellor, Central University of Kashmir, for approving the conference and his constant support in organizing the conference. We express our sincere thanks to all the officials of Central University of Kashmir including staff of Central Library for their support and guidance.

We also express our sincere thanks to Asian Library Association, New Delhi in collaborating with Central University of Kashmir for holding this conference. The collaboration has raised the standards of the conference immensely.

We are thankful to all the members of conference advisory committee, experts, resource persons and invited speakers and particularly our contributing authors and other participating delegates for their support and adding value to the programme, conference volume, and deliberations by their kind presence and participation.

We sincerely thank all the publishers, distributors and organisations for their financial support and sponsorship of the conference.

We express our sincere thanks to all the authors for contributing papers to the volume and hope that publication will be a welcome addition to the literature of Library & Information Science. August 01, 2018

Dr. Abdul Majid Baba
Dr. Raj Kumar Bhardwaj
Dr. S.S.Dhaka
Dr. Tariq Ashraf
Dr. Nabi Hasan
(Editors)

Srinagar, August 1, 2018

Publication Productivity of ‘E-Learning’ by Scopus During 2003-2017

Amir Amanullah Sogam-Lolab

Government Degree College, Kupwara, Jammu and Kashmir librarian8kargil@gmail.com

G. P. Khiste

Knowledge Resource Centre

Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra

khistegajanan@gmail.com

Abstract

E-learning refers to learning that is facilitated by using digital tools and contents. It involves some form of interactivity, which may include online interaction between the learner and their teacher or peers & Scopus is a premier research platform, helping to find, analyze, and share information in the sciences, social sciences, arts, and humanities. Therefore, the present study discusses the “e-learning” as reflected in Scopus for the period from 2003-2017. The present paper investigates to find out the top contributing institutions, most prolific authors, the preferred sources for publications, by Geographical distribution by country, Subject area, Source Type, Affiliation, and Language etc. The result indicates that there were total 11948 documents on e-learning from 2003 to 2017. The main institutes contributing to e-learning are Universitat Oberta de Catalunya contributed 86 documents.

Keywords: *E-learning, Scopus, Publication Productivity.*

1. Introduction

The term “e-learning” has been in used since 1999 when the word was first utilized at a CBT systems seminar. Other words also used synonymously such as “online learning” and “virtual learning”. Horton (2000) explained E-learning is part of the biggest change in the way our species conducts training since the invention of the chalkboard or perhaps the alphabet. The development of computers and electronic

communications has removed barriers of space and time. We can obtain and deliver knowledge anytime anywhere. Thus from the above discussed importance of e-learning, the research study is taken for research purpose. Epignosis LLC. (2014) E-learning is a nebulous term; meaning teaching-learning facilitated through the modern media like web, satellite, cable networks, etc. E-Learning is self-learning process using IT Communications, networks and other means.

3. Objectives of the Study

1. To Identify Publication productivity on E-learning by chronologically.
2. To find out highly productive authors E-learning.
3. To analyze the data geographically and types of documents.
4. To get information Writing of Research areas.
5. To finds out Language wise documents in Scopus on E-learning.

4. Methodology of the Study

The scope of the research is restricted to search results on the “E-learning” by using Scopus database during 2003 to 2017. The following type search strategy used for the data collection for the study.

In the Scopus database search “E-Learning” in Title Field & year 2003 to 2017 restricted for the results. Scopus data was used in the study. Scopus is Elsevier’s abstract and citation database launched in 2004. Scopus covers nearly 36,377 titles from approximately 11,678 publishers, of which 34,346 are peer-reviewed journals in top-level. (<https://www.scopus.com/home.uri>)

6. PREVIOUS STUDIES RELATED TO RESEARCH

(Khiste Gajanan P. & Amanullah Amir, 2017) studied the availability of “Knowledge Management” publication in Web of Science for the period from 2007–2016. The result indicates that there were total 6084 documents on Knowledge Management from 2007 to 2016. According to the geographical distribution of documents. (Kumar Phuldeep and Gulla Umesh, 2011) discussed e-learning as adopted by the corporates to boost their employee training efforts. The concept of corporate e-learning, stimulators for adoption, various benefits and drawbacks, present state, and e-learning

experiences have been enumerated. (Kumar Ram & Kush Ashwani, 2006) analysis has been done to find the positive and negative impacts of e-learning. The days of the traditional classroom are far from over; e-learning is going to become a powerful supplement to traditional teaching methods, not replace it entirely. (Pujar S.M. and Kamat R.K., 2009) discusses e-learning-library linkages and the innovations implemented in the top ranking off-shore public libraries that the Indian LIS community can follow. It reveals an emanating strongly bonded model of e-learning–library linkage required for the sustenance and mutual growth of the duo. This will also lend a hand in emerging an open knowledge culture and ultimately beneficial for the evolving knowledge society. (Sehra Siddharth, Maghu Sunakshi and Bhardawaj Avdesh, 2014) critically review the comparison between e-learning and distance learning techniques, discussing the effectiveness, drawbacks, and advantages of both. (Veer D. K., Khiste Gajanan P. & Deshmukh Rahul K., 2018) studied availability of publication on the term Information Literacy in Scopus database during the period 2007 to 2016. It is observed from the study total 2097 documents available on Information Literacy in Scopus from 2007 to 2016. (Veer D. K., Khiste Gajanan P. & Veer Chaitanya, 2018) discusses the term “Cloud Computing” as reflected in SCOPUS for the period during 2009 to 2016. The present paper investigates the highly productive authors, Document Types, it aims to find out the top contributing institutions, most prolific authors, the preferred sources for publications by Geographical distribution by country, Subject area, Source Type, Affiliation, and Language etc. The result indicates that there are 11251 documents on Cloud Computing during 2009 to 2016. India’s contribution to Cloud Computing is 1465 documents during 2009 to 2016, which is on the third rank.

(Watanbe Keiko, 2005) studied the needs of Japanese universities and learners for e-learning.

7. Results

The dataset was analyzed from various angles to achieve the objectives of the study. The results are presented below in tables 1-10.

7.1 Year wise Document Productivity Analysis

It is seen from the table no.1 year wise publication productivity on “E-learning”.

Table No. 1. Year wise Documents Published on “E-learning”

Year	Documents (Percentage)	Cumulative
2017	725 (6.07)	725
2016	772(6.46)	1497
2015	781(6.54)	2278
2014	840(7.03)	3118
2013	894(7.48)	4012
2012	923(7.72)	4935
2011	987(8.26)	5922
2010	1121(9.38)	7043
2009	1109(9.28)	8152
2008	1027(8.6)	9179
2007	835(6.99)	10014
2006	751(6.29)	10765
2005	600(5.02)	11365
2004	329(2.75)	11694
2003	254(2.13)	11948
Total	11948(100)	

It is seen from the Table No.1 year-wise publication productivity on “e-learning”. The largest number of documents were published in the year 2010 i.e., 1121 (9.38%) and smallest number of documents 254 (2.13%) were published in the year 2003.

7.2 Most Active Authors

The author has analyzed the data related to active authors for writing documents on “E-Learning” and it is presented in the Table No. 2. Sandars, J. ranks first who has contributed a maximum number of 44

documents and on 5th rank 18 documents published by Gaeta, M. & Wang, M.

Table No. 2. Top Five Authors

Name of the Author	Documents	Rank
Sandars, J.	44	1
Okamoto, T.	26	2
Cristea, A.I.	21	3
Jemni, M.	21	3
Xhafa, F.	21	3
Barolli, L.	19	4
Gaeta, M.	18	5
Wang, M.	18	5

7.3 Geographical Analysis of Documents

Table No. 3 depicts the geographical distribution of documents. Highest documents contributed by United Kingdom authors i.e. 1084 documents, followed by the United States with 1005 documents to its credit. China published 907 documents and Spain produced 723 documents and India published 533 documents with the rank 7th position.

Table 3. Top 10 Country wise highest documents on “E-learning”

Sr.No.	Country	Documents	Rank
1	United Kingdom	1084	1
2	United States	1005	2
3	China	907	3
4	Spain	723	4
5	Taiwan	655	5
6	Germany	627	6
7	India	533	7
8	Italy	497	8
9	Japan	495	9
10	Australia	457	10

7.4. Types of Documents

Table No.4 indicates that there are 13 different types of documents however the highest number of documents published in Conference Paper i.e. 6187 (51.78%), smallest number of contributions are categorized under Retracted i.e. 1 (0.01%).

Table No.4 Documents Types & No. of Documents on “E-Learning”

<i>Sr.No.</i>	<i>Document Types</i>	<i>No. of Documents</i>	<i>Percentage</i>
1	Conference Paper	6187	51.78
2	Article	4058	33.96
3	Book Chapter	874	7.32
4	Review	336	2.81
5	Editorial	99	0.83
6	Conference Review	93	0.78
7	Note	88	0.74
8	Book	76	0.64
9	Short Survey	55	0.46
10	Letter	43	0.36
11	An Article in Press	27	0.22
12	Erratum	11	0.09
13	Retracted	1	0.01
Total		11948	100

7.5. Data Analysis by Subjects

From the Table No. 5 it is seen that subject-wise analysis indicates that the highest number of contributions was in the area of Computer Science (6697) followed by Social Sciences (5036) documents.

Table 5. Subject wise Documents Availability on “E-learning”

<i>Sr.No.</i>	<i>Subjects (Documents)</i>
1	Computer Science(6697)
2	Social Sciences(5036)
3	Engineering(2370)
4	Mathematics(985)
5	Business, Management and Accounting(937)
6	Medicine(894)
7	Decision Sciences(457)
8	Arts and Humanities(239)
9	Psychology(228)
10	Nursing(203)
11	Health Professions(170)
12	Biochemistry, Genetics and Molecular Biology(132)
13	Economics, Econometrics and Finance(116)
14	Physics and Astronomy(102)
15	Materials Science(99)
16	Environmental Science(77)
17	Energy(72)
18	Multidisciplinary(67)
19	Agricultural and Biological Sciences(63)
20	Chemical Engineering(57)
21	Earth and Planetary Sciences(51)
22	Pharmacology, Toxicology and Pharmaceutics(45)
23	Chemistry(38)
24	Dentistry(30)
25	Neuroscience(17)
26	Undefined(12)
27	Veterinary(10)
28	Immunology and Microbiology(5)
Total(19209)	

7.6. Highest Ranking Sources

Table No. 6 indicates that highest ranking sources in which documents were published. As per Table No.6, Lecture Notes in Computer Science ranks first with 522 documents to its credit, followed by Proceedings of the International Conference on E-Learning ICEL ranking on second with 148 documents & Proceedings of the European Conference on E-Learning ECEL are on the Tenth rank with 65 documents.

Table 6. Highest Ranking Sources in which published documents on “E-learning”

Highest Ranking Sources	Documents
Lecture Notes In Computer Science	522
Proceedings of the International Conference on E Learning ICEL	148
Communications In Computer And Information Science	130
ACM International Conference Proceeding Series	122
Computers And Education	118
Ceur Workshop Proceedings	101
International Journal of Emerging Technologies In Learning	97
Educational Technology And Society	77
British Journal of Educational Technology	73
Proceedings of the European Conference on E-Learning ECEL	65

7.7 Documents Analysis by Language wise

The Table No. 7 indicates that Documents Analysis by Language wise on “E-learning”. It is observed that the English Language is highly preferred language for writing documents on E-learning i.e.11487 documents.

Table 7. Documents Analysis by Language wise on “E-learning”

Language (Documents)	Rank
English (11487)	1
German (171)	2
Spanish (122)	3
French (69)	4
Chinese (55)	5

7.8 Collaborative Platform

Table No. 8 shows the top ten Affiliation contributions on the topic of “E-learning”. Highest documents contributed by Universitat Oberta de Catalunya i.e.86 documents & the University of

Hong Kong contributed 46 documents on the rank tenth.

Table 8. Affiliation wise Distribution of Documents on “E-learning”

Institution	Documents	Rank
Universitat Oberta de Catalunya	86	1
University of Zagreb	62	2
Universita di Salerno	58	3
City University of Hong Kong	54	4
Open University	53	5
Athabasca University	52	6
Universidad de Vigo	52	7
University of Southampton	51	8
King Saud University	47	9
The University of Hong Kong	46	10

7.9 Source Types

It is seen from the figure 1 and Table No.9 that highest source type wise documents on “E-learning”. Published in Conference Proceedings i.e. 5330 (44.61%) and lowest published in Trade Publications 51 (0.43%).

Table 9. “E-learning” documents by Source Type wise in Scopus

Source Type	Documents (Percentage)
Conference Proceedings	5330(44.61)
Journals	4563(38.19)
Book Series	1063(8.89)
Books	941(7.88)
Trade Publications	51(0.43)
Total =	11948(100)

8 Conclusion

Publication access type means the type of category of documents whether documents are available

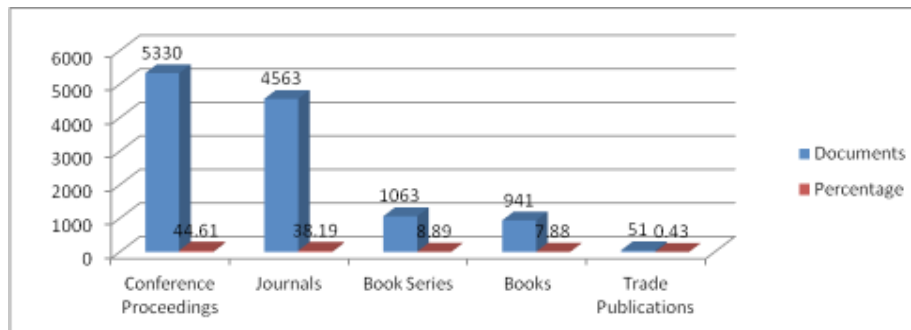


Figure 1. “E-learning” documents by Source Type wise in Scopus

Open Access or Subscribe Based through Scopus is defined in Table No.10. Table shows that among total 11948 documents 150 (1.26%) documents are open access and 11798 (98.74%) articles are Subscribe Based. It is concluded from the above study that there was a valuable publication contribution by Authors, different Countries in the field of “E-learning” during the study period. The contribution of documents on “E-learning” indicates that healthy pattern of progress in this field.

REFERENCES

- <https://www.scopus.com/home.uri> (2018, May 5).
- Epignosis LLC. (2014). *E-Learning Concepts, Trends & applications*, January 2014,. California:
- Epignosis LLC.P.8 Retrieved from <https://www.talentlms.com/elearning/elearning-101-jan2014-v1.1.pdf>
- Horton, W. (2000). *Designing Web-based Training*. New York: John Wiley and Sons.P.6
- Kale Vilas, Deshmukh Rahul & Khiste Gajanan (2017) A Bibliometric survey of the literature published by web of science on ‘consortia’ from 1989-2016, *New Man International Journal of Multidisciplinary Studies*,4(10),Pp.75-82.
- Khiste Gajanan P. & Amanullah Amir (2017). Analysis of Knowledge Management output in Web of Science during 2007 to 2016. *International Research: Journal of Library & Information Science*, 7(4), Pp.758-773. <http://irjlis.com/analysis-of-knowledge-management-output-in-web-of-scienceduring-2007-to-2016/>
- Kumar Phuldeep and Gulla Umesh (2011). Corporate e-Learning: Possibilities, Promises, and Realities. *DESIDOC Journal of Library & Information Technology*, 31(3), Pp.179-188.
- Kumar Ram & Kush Ashwani (2006). E-Learning Emergence. *DESIDOC Bulletin of Information Technology*, 26(2), Pp.19-24.
- Pujar S.M. and Kamat R.K. (2009). Libraries—a Key to Harness E-Learning: Issues and Perspective. *DESIDOC Journal of Library & Information Technology*, 29(1), Pp.23-30.
- Sehra Siddharth, Maghu Sunakshi and Bhardawaj Avdesh (2014). Comparative Analysis of E-learning and Distance Learning Techniques. *International Journal of Information & Computation Technology*,4(8), Pp.823-828.
- Veer Chaitanya, Veer D. K.& Khiste Gajanan P(2018) BIG DATA Output in Scopus during 2012 to 2016: A Bibliometric Analysis, *Knowledge Librarian, Special Issue*, January 2018,Pp.509-516.
- Veer D. K., Khiste Gajanan P. & Deshmukh Rahul K. (2018). Publication Productivity of Information Literacy in Scopus during 2007 to 2016. *Asian Journal of Research in Social Sciences and Humanities*, 8(2), Pp.171-183.
- Veer D. K., Khiste Gajanan P. & Veer Chaitanya (2018) Productivity of “Cloud Computing” documents during 2009– 2016 - A Study with Special Reference to SCOPUS. *International Journal of Scientific Research in Computer Science, Engineering and Information Technology*,3(1),Pp.1198-1204.
- Welsh, E. T., Wanberg, C. R., Brown, K. G and Simmering, M.J. (2003), E learning: emerging uses, empirical results and future directions. *International Journal of Training and Development*, 7(4), Pp.245-258. doi:10.1046/j.1360-3736.2003.00184.x
- Watanbe Keiko (2005) A study on needs for e-learning – through the analysis of national survey and case studies, *Progress in Informatics*, No.2, Pp.77-