

**Qualitative and Quantitative Methods in Libraries**  
**QQML 2013**

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Editor  
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## Preface

It is our pleasure to welcome you in Rome, Italy to the 5<sup>th</sup> Qualitative and Quantitative Methods in Libraries International Conference (QQML2013) which is organized under the umbrella of ISAST (International Society for the Advancement of Science and Technology).

Library and Information Science is continuously expanded and integrated to other sciences, as a result of both theoretical and applied research. The QQML International conference proves this with the continuous enrichment of the content and the expansion of the subject topics.

This is the fifth year of the conference organization and two parallel trends are noticed: on the one hand we have repeated participations that present the progress of their research and professional work and we also have new topics. This is the evidence of the dynamics of this conference.

The Conference brings together different disciplines for library and information science; it is a multi-disciplinary conference that covers the Library and Information Science topics in conjunction to other disciplines (e.g. innovation and economics, management and marketing, statistics and data analysis, information technology, human resources, museums, archives, special librarianship, etc).

The papers come from all over the world and referred to every kind of libraries, so the book helps the readers to have a holistic view on the subject.

The conference provides an interesting program containing special and contributed sessions, oral communications, workshops and posters.

The contributors are library professionals in a more general sense: professors, researchers, students, administrators, librarians, technologists, museum scientists, archivists, decision makers and managers.

The authors come from 65 countries: 27 European, 19 Asian, 9 African, 6 American and 2 Oceania countries. Algeria, Australia, Austria, Bangladesh, Belarus, Belgium, Botswana, Brazil, Bulgaria, Canada, Cayman Islands, China, Croatia, Czech Republic, Estonia, Ethiopia, Finland, France, Germany, Ghana, Greece, Hong Kong, Hungary, India, Iran, Ireland, Italy, Japan, Kenya, Korea, Kuwait, Lithuania, Malaysia, Mexico, Moldavia, New Zealand, Nigeria, Norway, Oman, Pakistan, Philippines, Poland, Portugal, Qatar, Romania, Russian Federation, Saudi Arabia, Serbia, Singapore, Slovakia, South Africa, Spain, Sri

Lanka, Sweden, Taiwan, Thailand, The Netherlands, Turkey, Uganda, UK, USA, Virgin Islands, Zimbabwe

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We acknowledge the valuable support of Professor Raimondo Manca, “La Sapienza” University of Rome and Professor Carla Basili, CERIS Rome. Sincere thanks must be recorded to colleagues, friends and partners who worked hard for the conference success and especially the conference committees, speakers and plenary speakers, workshop organizers, authors and reviewers. Finally, we would like to heartedly thank Christos Skiadas, Aggeliki Oikonomou, Iro Tzorbatzaki, Aris Meletiou, Eleni Molfesi and Chiara Faggiolani for their valuable cooperation.

Athens, May 2013

*Anthi Katsirikou*, University of Piraeus Library, Greece

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### Special and Contributed Sessions

**SESSION TITLE: Bibliometric research.** Coordinator: **Teresa S. Welsh**, Ph.D., Associate Professor, Library & Information Science, University of Southern Mississippi, USA.

Scope & rationale: Bibliometrics literally means the measurement of books but it has come to mean the analysis of patterns of information related to usage data or publication data in print or electronic format. This session will focus on research such as publication pattern analysis, citation analysis, and content analysis of scholarly literature, Web sites, databases, or collections.

1. *A bibliometric study of LIS literature related to academic law librarianship.* James Parks
2. *Librarianship and scientometrics: support or surveillance in the research publication process.* Fredrik Åström and Joacim Hansson
3. *Predictors of legislators' adoption and use of ICT in the performance of legislative functions in the Nigerian National Assembly.* Gbolahan Olasina and Stephen Mutula
4. *Usage Factor: a new, usage-based metric for measuring journal impact.* Peter T. Shepherd
5. *Citation analysis of some Hungarian medical journals compared with Italian and international Open Access medical journals between 2007-2011 - Based on Web of Science, SciVerse Scopus databases and different bibliometrics indicators and tools.* Edit Csajbók, Anna Berhidi, Livia Vasas
6. *Research collaboration between Stockholm University and other Swedish academic units: a bibliometric study to support decisions on library collaboration.* Camilla Hertel-Lindelöw, Johan Hinders, Sara Parmhed, Per Swedberg and Per Ahlgren
7. *Bibliometric analysis: Slovenian Journal of Public Health vs. European Journal of Public Health.* Petruša Miholič
8. *The relevance of publications on the subject Innovation in Portuguese language over the last 30 years: a bibliometric contribution.* Janete S. Bach Estevão and Walter Tadahiro Shima
9. *Scholarly collaboration among ASEAN countries: A bilateral bibliometric study.* Songphan Choemprayong
10. *Electronic Journal of Academic & Special Librarianship (E-JASL): a bibliometric study.* Avijit Chakrabarti

11. *Evaluation of scientific productions and illustrating the scientific Map of Middle East Researchers in the field of bibliometrics in 1990-2011 based on Web of Science (WOS).*

Niloofar Hodhodinezhad, Hasan Ashrafi-rizi and Shima Shafieyan

12. *New questions arise: are bibliometric indicators adequate for evaluating the scientific production of the Social Sciences and Humanities?* Maria João Pinto and Sofia Fernandes

13. *Research journal of physical education and sports sciences, the SHIELD: a bibliometric study.* Saeed Ullah Jan, Rafia A Sheikh

14. *Research papers of Acharya Prafulla Chandra Roy: a bibliometric study.* Avijit Chakrabarti, Biplab Chakrabarti

**SESSION TITLE: Library and Information Science Post-Graduate Student Research.** Coordinator: **Teresa S. Welsh**, Ph.D., Associate Professor, Library & Information Science, University of Southern Mississippi, USA.

Scope & rationale: Post-graduate students will present research on a variety of topics related to LIS. In order to promote evidence-based librarianship, it is important to provide a venue for masters and doctoral students to report on their research and contribute to the body of scholarly LIS literature.

List of papers

1. *Primary Source Material Relating to the Tudors within the City of London*

Author: Jamie Jones, University of Southern Mississippi, USA

2. *Aspects of authorship, coauthorship, and productivity in School Library Research 1998-2012* Marilyn M. Brissett

3. *New possibilities for e-learning master programs in LIS and cultural heritage sciences education in Bulgaria.* Ivanka Yankova, Tania Todorova, Rumelina Vasileva, Silvia Stancheva and Boryana Hadzhieva

4. *The effects of research centre establishment on inter-departmental research collaboration: a micro-level co-authorship analysis.* Fredrik Åström

5. *Librarians leadership styles and subordinates job performance in Federal University Libraries in South West, Nigeria.* J. S. Opaleke

**SESSION TITLE: Methods and Approaches to Integrate Social Justice in Library and Information Science.**

Coordinator: **Bharat Mehra**, School of Information Sciences, University of Tennessee, Knoxville, Tennessee, USA.

Scope & rationale: This session focuses on the methods, approaches, and strategies that diverse library and information science (LIS) educators, practitioners, and service providers have adopted to integrate and actualize social justice principles in their information-related work and activities. Presenters will critique various quantitative, qualitative, action research, and/or mixed method approaches and question their significance and applicability to achieve action-oriented socially relevant outcomes in their work that further community-wide progressive changes partnering with, and, on behalf of people on society's margins. The discussion will extend the discussions initiated during the first panel on social justice in LIS that was presented last year during the 4th International Conference on Qualitative and Quantitative Methods in Libraries, in Limerick, Ireland. The session will present speakers who engage in research and teaching that aims to generate social impacts and community involvement in LIS practice, education, service design, and program implementation, with a focus on method analysis and implementation.

List of papers:

1. *Recruitment and Retention in the Information Technology Rural Librarian Master's Scholarship Program (Part I and Part II): Implications of Social Justice in the Southern and Central Appalachian Region.* Author(s): **Bharat Mehra, Vandana Singh**, School of Information Sciences, University of Tennessee, Knoxville, Tennessee, USA.
2. *A Case Study of Migration to an Open Source ILS: Partnership among the State Libraries.* Author: **Vandana Singh**, School of Information Sciences, University of Tennessee, Knoxville, Tennessee, USA
3. *Building Civic Capacity Using a Holistic Approach to Public Library Service: Implications for Social Justice in the Cayman Islands Public Library Service.* Author: **Kaurri C. Williams-Cockfield**, Cayman Islands Public Library Service, Grand Cayman, Cayman Islands
4. *Information Technology Services and School Libraries: A Continuum of Social Justice.* Authors: PT Dadlani and Ross Todd, Rutgers University–New Brunswick.

**SESSION TITLE: Examining online reference data: quantitative and qualitative approaches**

**Abstract:** Ask a Librarian is a virtual reference service that provides online research help to university students across Ontario, Canada. The service supports students at nine universities (representing more than half of all full-time equivalents in Ontario) and is staffed by librarians and library school students from those same institutions. All chats that occur within the Ask a Librarian system are recorded and stored by the system. This dataset, which consists of transcripts and participant information, currently contains nearly 20,000 records of chats that took place over the last 13 months. The large scale of this dataset provides an opportunity to employ both quantitative and qualitative methods to gain a broad sense of the state of virtual reference in Ontario and to dig deeper into individual patron/librarian interactions occurring in Ontario university libraries. We will discuss our initial results and address some of the challenges involved in conducting analysis of this massive online dataset. Some of the considerations for working with this data include patron and staff privacy, patron's English language skills and their impact on the patron-librarian chat communication, and also the differences and similarities amongst the nine distinct library communities that participate in the service.

**Presenters:** **Klara Maidenber**g, Virtual Reference Services Librarian, Information Technology Services-OCUL-VDX Project, University of Toronto Libraries and **Jenaya Webb**, Public Services Librarian, Ontario Institute for Studies in Education, University of Toronto Libraries

**SESSION TITLE: Collaboration projects in evaluating and promoting information science and library services.**

**Chair:** Prof. Dr. **Angela Repanovici**, Transilvania University of Brasov, Romania.

**Scope & rationale:** In this session we are looking for best practice and good results in evaluation and assessment models for all kinds of libraries. We are especially interested in international collaborations in creating and implementing tools for one library/locality/country or several. Typical papers for this session would show practical and

theoretical considerations, dealing with issues of use for libraries or teaching information science.

Presenters

1. *International collaboration in evaluation of information literacy user needs*

Authors: **Angela Repanovici**, Transilvania University of Brasov, Romania, **Ane Landoy**, Bergen University Library, Norway, **Natalia Cheradi**, Economical Science Academy, Chisinau, Moldavia

2. *National Library of Romania – a new headquarter – new challenges and perspectives*. Author: Elena Tarziman, University of Bucharest, Romania.

3. *Teaching approaches of information literacy, how to evaluate teaching activity*. Authors: **Angela Repanovici**, Transilvania University of Brasov, Romania, **Manolis Koukourakis**, Crete University Library, Greece

4. *Museum collections in a library: Valorisation and case study: Batthyaneum Branch of National Library of Romania*. Author: **Doina Hendre Biro**, National Library of Romania

5. *Libraries as sources of investigation for the history of Romanian illustrated press at the beginning of XXth century*. Author: **Adriana Dumitran**, National Library of Romania

6. *Open Access impact on the visibility of science*. Author: **Nelly Turcan**, Moldova State University.

### **SESSION TITLE: Researching as we practice: the experience of academic librarians**

Coordinator: **Maria G. N. Musoke** (PhD), Prof. of Information Science and University Librarian, Makerere University Library, Kampala, Uganda

Scope & rationale: Academic libraries operate in multi-faceted institutions. Due to the need to provide cutting edge service, Makerere University Library (Maklib) has evolved in its approach to service delivery. This has been a result of innovative leadership and a series of research undertaken by Librarians at Maklib, which have yielded new and innovative ways of service delivery. In order to sustain innovations, Maklib has continued to focus on research, outreach, training, learning from other academic libraries and engaging in meaningful partnerships regionally and internationally. In the process, Maklib has learned lessons which have been used to address local problems. This has been

fueled by the reality of the world being a global village, thus external experiences, increased Library user expectations and involvement in the information chain have caused a paradigm shift in the way Maklib handles library service delivery regardless of local bottlenecks. This session, therefore, is intended to share Maklib's experiences which can be adapted by other academic libraries. Some of the researches to be shared are:

- Evaluation of the IR using the balanced score card.
- Information Technology as an enabler of knowledge management processes with use of the Virtua Integrated Library System at Makerere University Library, Kampala, Uganda.
- Measuring Usage of new library books and computers.
- Enhancing subject access to locally published resources.

List of papers:

1. *Informing policy and practice through assessment of new library books' usage at MakerereUniversity.* Authors: **Maria G. N. Musoke, Andrew Mwesigwa and Agnes Namaganda, Caroline Ilako, Monica Naluwooza, Patrick Sekikome, Philliam Adoma, Rachel Nakalembe, Sylvia Munafu and Wilberforce Musoke,** Makerere University Library, Uganda
2. *A system dynamics decision support system for the book bank system at MakerereUniversity Library.* Author: **Andrew Mwesigwa,** Makerere, University Library, Uganda.
3. *Evaluation of MakerereUniversity library services: optimising service delivery*  
Authors: **Agnes Namaganda, Monica Naluwooza and Patrick Sekikome,** Makerere University Library, Uganda.
4. *Evaluating MakerereUniversity library's institutional repository using the balanced scorecard.* Author: **Monica Naluwooza,** MakerereUniversityLibrary, Uganda

**SESSION TITLE: Using qualitative and quantitative methods in digital library education and research.**

Coordinators: **Sirje Virkus**, Professor, Tallinn University, Institute of Information Studies, Estonia & **Aira Lepik**, Associate Professor, Tallinn University, Institute of Information Studies, Estonia

Scope & rationale: This session aims to encourage the discussions and

provide examples of usage of qualitative and quantitative methods in digital library research. This session comprises seven papers each of them will be presented by individual authors. All seven authors are related with Digital Library Learning (DILL) master programme - four are current master students, one is DILL graduate and two are faculty members. Authors explore in their papers the issues related to digital library education, social, economic, educational and organizational aspects of digital libraries, and social networking issues in the different regions of the world using a quantitative and qualitative inquiry. The students' papers of this session are based on research done within their Master Thesis projects in the Digital Library Learning (DILL) programme at TallinnUniversity or their PhD Thesis projects. DILL is a two-year Master Programme for information professionals who intend to work in the complex world of digital libraries. DILL is offered in cooperation between Oslo and Akershus University College of Applied Sciences (Norway), TallinnUniversity (Estonia), and ParmaUniversity (Italy) -<http://dill.hio.no/>

#### List of papers

1. **Sirje Virkus**, TallinnUniversity, Institute of Information Studies, Estonia and **Gillian Oliver**, VictoriaUniversity of Wellington, School of Information Management, New Zealand. *Pushing the boundaries: Analysis of research projects undertaken in the International Digital Library Learning programme.*
2. **Aira Lepik**, TallinnUniversity, Institute of Information Studies, Estonia. *Individual project options in Human Resources Management/HRM module: a case of Digital Library Learning.*
3. **Valentina Milovanovic**, TallinnUniversity, Institute of Information Studies, Estonia. *The training needs of employees working in the departments dealing with digital content: Comparative study in contexts of Serbian and Estonian libraries.*
4. **Haleh Rajabi and Sirje Virkus**, TallinnUniversity, Institute of Information Studies, Estonia. *Evaluating potential and demand of establishing MOOCs in Tallinn University*
5. **Ravinder Pallikonda**, TallinnUniversity, Institute of Information Studies, Estonia. *Educational opportunities of MOOCs (Massive Open Online Course).*
6. **Leonéia de Oliveira Evangelista**, Tallinn University, Institute of Information Studies, Estonia, **Emanuele Bardone**, Tallinn University, Institute of Informatics, Tallinn University, Estonia.



*virtual ethnographic approach to knowledge sharing: tracking tacit clues on Food52.*

7. **Sirje Virkus and Anne Uukkivi**, TallinnUniversity, Institute of Information Studies, Estonia. *Modernization of Library and Information Science Education through the enhancement of intercultural communication.*
8. **Momena Khatun**, TallinnUniversity, Institute of Information Studies, Estonia. *Digital Information Literacy of Oslo Public Library Professionals.*
9. **Juan D. Machin-Mastromatteo and Sirje Virkus**, TallinnUniversity, Institute of Information Studies, Estonia. *Building a participative methodology for the facilitation of international information literacy courses.*

#### **SESSION TITLE: Methods in Libraries Studies research: a postgraduate perspective**

Coordinator: Dr. **Egbert J. Sanchez Vanderkast**, Research Institute for Library and Information Studies of the National Autonomous University of Mexico (UNAM), Mexico. (Instituto de Investigaciones Bibliotecológicas y de la Información, Universidad Nacional Autónoma de México)

Scope & rationale: At Postgraduate program of the National Autonomous University of Mexico in Library and Information Studies, research is done by the master and doctoral level students. Most of these applied quantitative and qualitative methods of any kind. The aim of this session is to present seven different topics/themes, the use of qualitative method and several techniques, the findings and/or final results.

List of participants:

1. *Methodological Proposal for Analyzing the Development of Information Policies to Promote the Society of Information and Knowledge in Mexico.* Author: **Maria de los Angeles Medina Huerta**, M.L.I.S., student in Library and Information Studies in the National Autonomous University of Mexico (UNAM)

2. *Comparative Analysis in the Ethical Use of Information and Librarianship Education in Mexico: an Investigation Process* Author: **Antonio Cobos Flores**, Ph.D. student in Library and Information Studies of the National Autonomous University of Mexico (UNAM)
3. *Perspectives on the Investigation about the Organization of Information of Digital Photography for the Digital Library*. Author: **Adriana Monroy Muñoz**, Ph.D. student of Library and Information Studies, National Autonomous University of Mexico (UNAM).
4. *Content Analysis Method in Scientific Literature Produced in the Areas of Librarianship and Information Sciences in Mexico*. Author: **Celia Mireles Cardenas**, Prof. School of Information Science, Autonomous University of San Luis Potosí. Mexico
5. *Methodological research use documentary in the study of application of Linked Open Data in digital academic library*. Author: **Eder Ávila Barrientos**, M.L.I.S. student in Library and Information Studies in the National Autonomous University of Mexico (UNAM)
6. *Digital Literacy and Social Investigation Methodologies* Author: **Fabiola Martínez Lopez**, M.I.L.S. student in Library and Information Studies of the National Autonomous University of Mexico (UNAM)
7. *Implications of Library State Laws on Information Services in Public Libraries* Authors: **Rocio C. Herrera Guzman**, Ph.D. student Metropolitan Autonomous University-Iztapalapa. Mexico and **Egbert J. Sanchez Vanderkast**, National Autonomous University of Mexico (UNAM)
8. *Internet infodiversity: state of the art and future trends* Author: **Jonathan Hernández Pérez**, Ph.D. student, Library and Information Studies, National Autonomous University of Mexico (UNAM), Mexico

**SESSION TITLE: Information Policies in Science.**

Coordinator: **Carla Basili**, Consiglio Nazionale delle Ricerche, “Sapienza” University of Rome, Italy.

Scope & rationale: Knowledge circulation and scientific information flow have acquired a strategic importance to European economy since the launch in 2000 of the Lisbon Strategy for a knowledge-based economy. As a consequence, it is claimed that improved availability,

access and persistence of scientific information will play a vital role in fostering research & development and promoting innovation. Against this context, the session addresses some of the many different aspects of information policy, in the Sciences in general, and in the Humanities more specifically.

#### List of papers

1. *The European vision on Scientific Information* Author: **Carla Basili**, Consiglio Nazionale delle Ricerche, “Sapienza” University of Rome, Italy
2. *Correlation and regression between proprietary and open access scientometrics tools -an exploratory study.* Author: **Angela Repanovici**, Transilvania University of Brasov, Romania
3. *Altmetrics: a case study on information practices of humanities scholars.* Author: **Anna Maria Tammara**, University of Parma, Italy
4. *The Evaluation of Research in the Humanities: A Comparative Analysis.* Authors: **Chiara Faggiolani-Giovanni Solimine**, “Sapienza” University of Rome, Italy
5. *Library and science indicators: towards a new paradigm to assess the library and information services as an input to the academic processes.* Authors: **Carla Basili – Markku Laitinen – Jarmo Saarti**, Consiglio Nazionale delle Ricerche, Italy; National Library, Finland; University of Eastern Finland Library, Finland
6. *Digital preservation: an open-source architecture.* Authors: **Giancarlo Birello, Valter Giovanetti, Ivano Fucile**, Cnr-Ceris, IT-Office, **Anna Perin**, Cnr-Ceris, Library, Italy

#### **SESSION TITLE: Information Literacy in the curriculum across Disciplines**

Organizers: **Anthi Katsirikou, Ageliki Oikonomou, Konstantinos Kyprianos**, University of Piraeus Library, Greece

Scope & rationale: A vast amount of models and terminology has been developed globally by libraries and other organizations and associations to define the skills that must someone have in order to be information literate. In the era of information plethora and digital technology, the information literacy skills are becoming more and more necessary.

Universities worldwide and especially academic libraries have early realized the importance of information literacy and they started to provide tools and programs to their students. These tools and programs were aiming to help students to recognize when information is needed and have the ability to locate, evaluate and use effectively the information needed. Besides, this is the definition of information literacy according to ALA. Nowadays, information comes in many formats and forms and its validity and its quality is not always guaranteed. Students must develop new cognitive skills in order to use this information succinctly and efficiently. Additionally, the specialization in disciplines made prerequisite the information literacy to interfere with the curriculum. In these lines of thoughts, many universities and institutions around the world are starting to endorse information literacy into the curriculum. Nowadays, many universities and institutions around the world are endorsing the information literacy into the curriculum. The purpose of this session is to present innovative proposals, applications and syllabus regarding the subject information literacy that run into the disciplines in regional and international level and the benefits of such a venture.

Topics of interest:

- Case studies and best practices
- Creative instruction of information literacy skills
- Critical thinking
- Information literacy across the disciplines
- Information literacy in the curriculum
- Innovative programs
- Policies and models
- Teaching information literacy across disciplines
- Teaching information literacy in academic libraries

List of papers

1. *Assessing Information Literacy skills among undergraduates: the case of Food Technology and Nutrition School at the Alexander Technological Educational Institute of Thessaloniki.* Authors: Margarita Chatzilia, Emmanouel Garoufallou, Vasiliki Mole, Thanasis Vafeiadis
2. *Critical Information Literacy: matching theory and inquiry.*  
Rosemary Green

3. *Engineers and information literacy: an oxymoron or a need? Academic and information literacy for future engineers*  
Authors: Dina Vrkić, Jelka Petrak, Bojan Macan.
4. *Experimenting with teaching strategies for Information Literacy instruction sessions*. Ma Lei Hsieh, Patricia H. Dawson, Melissa Hofmann, Megan L. Titus, Michael T. Carlin
5. *Forging new alliances through LMS' (Learning Management Systems)*  
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6. *Implementing critical thinking in cross disciplinary programs: a framework for global literacy* Barbara D. Farah
7. *Incorporating Archives-based Research into the Curriculum: A Collaborative and Outcomes-based Approach* Verónica Reyes-Escudero.
8. *Information Literacy of LIS students: gathering and synthesizing sources for a literature review*. Naresh Kumar Agarwal.
9. *Information literacy training modules developed for the University of Bolton WCMT Campus Sri Lanka: case study and best practices*. Lionel R. Amarakoon=, Sakunthala Kumari Amarakoon
10. *Integrating information literacy into English course for academically unprepared students*. Lyndsay Smanz.
11. *Integrating Information Literacy into the curriculum: creating and implementing an information literacy curriculum map*. Leslin Charles.
12. *Learning and teaching theories, instructional strategy and instructional design for information literacy programs: an IL model for academic libraries*. Kyriaki Balta.
13. *Library instruction within a discipline context: expectations and adaptations*. Laura Saunders
14. *Mapping transliteracy*. Suzana Sukovic
15. *Medical librarians as developers of e-learning courses in evidence based practice*. Helena Bouzkova, Jarmila Potomkova, Eva Lesenkova
16. *Qualitative and quantitative methods for building a digital literacy assessment tool for librarians*. Mei-Mei Wu, Ju-Hsiu Kuo
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18. *Tutoring an information literacy course – a new challenge for subject librarians*

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## Plenary Sessions

### **Looking out and looking in - the universe of information**

***Lynne Marie Rudasill***

Associate Professor, University Library, University of Illinois at Urbana-Champaign, USA

**Abstract:** We are all aware of the fact that the forces of globalization are not just felt in the spheres of economics, politics, and sociology. Library and information science is also facing the challenges brought on by vast technological changes that are having an increasingly foundational impact upon the field. The concepts of interdisciplinarity, problem-solving, and big data are explored here in an effort to understand the intricacies of measurement in a rapidly changing field, the tools that can be provided to our institutions and, most importantly, to our users. Beginning with a look at a galaxy of clickstream data that provides a striking example of interdisciplinarity, we can explore the information universe where competing methodologies, both quantitative and qualitative, demand our attention and resources. We will also try to see the expanding edges of our universe to understand where we might be going next.

### **Collaboration - the most wicked enabler to fabulously successful research**

***Dr. Karen E. Fisher***

Professor, University of Washington Information School, USA

**Abstract:** Collaboration signals bringing together people whose assets—professional skills and expertise, social capital, work styles, personalities, and more work in harmony towards achieving a common goal. A complex notion, collaboration ranges in degree of formality, whether required or voluntary, and extent and type of participation. Most research, like other human endeavors, comprises some element of collaboration. Yet stories approach urban myth of collaborations that were hard to create, wasted time, damaged relations, and left unfinished business leading to nowhere. However, collaboration can go remarkably well, showing the power of many, the creation of gold from dust. Two such examples are shared—macro and micro—that have several commonalities and yet vary widely in team size, budget, resources, and genesis. The U.S. Impact Study (2010-12) of how people use computers and the Internet in public libraries led by Fisher, Crandall and Becker was funded by the Bill & Melinda Gates Foundation and the Institute of Museum & Library Services. In addition to the PIs, assistants and consultants, the study comprised an expert committee and partnered with about 500 libraries. Mixed-methods—an unprecedented web survey (continuing today), telephone

survey and case studies—were used to study 50,000 people. The second study, InfoMe, is an ethnographic-design study that brings together public libraries, community-based organizations, corporate agencies and university researchers to understand how ethnic minority youth seek information and use technology on behalf of other people, especially older family members, and how this information mediary phenomenon can be supported through information technology, services and policy. This study—being exploratory, qualitative and design-focused but also involving survey techniques and community training workshops is vastly smaller in nature and entirely dependent on collaboration for success with its myriad partners. Funded by Microsoft and the Institute of Museum and Library Services, InfoMe led from the U.S. Impact Study that showed 63% of people used library technology on behalf of another person in the past 12 months, which has strong implications for how we design information systems, support information literacy, and determine impact. Together these two studies illustrate how collaboration can elevate the doing of research, turning every moment into a state of flow and igniting research programs with long-reaching effects.

## **Libraries and public perceptions: a comparative analysis of the European press. Methodological insights**

*Anna Galluzzi*

Senate Library in Rome, Italy

**Abstract:** Over the last years there has been much research and discussion about the future of libraries, particularly public libraries, in relation with the state of society and welfare. The economic crisis has exacerbated the situation of libraries in terms of budget cuts and their usefulness in the digital age has been put in doubt.

In these difficult times, many methods have been applied to prove the social and economic impact of libraries. An alternative method to measure the relevance and the public perception of libraries could come from the analysis of newspapers, considering that they still are an important means in building public opinion.

In this speech the methodology and the first findings of an ongoing research on this topic will be presented. The research is based upon a comparative textual analysis of 8 newspapers of national interest coming from 4 different European countries (UK, Italy, France and Spain) and concerns the quantity and quality of articles on libraries published since 2008 on.

## **Workshops**

**WORKSHOP:** Impact evaluation workshop

Workshop Organizers: Mr. Markku A. Laitinen, Planning Officer, The



National Library of Finland and Ms. Anna Niemelä, Service Coordinator,  
The National Library of Finland

**Impactevaluationworkshop**  
*Mr. Markku A. Laitinen<sup>1</sup>, Ms. Anna Niemelä<sup>2</sup>*

<sup>1</sup>Planning Officer, The National Library of Finland, Finland

<sup>2</sup>Service Coordinator, The National Library of Finland, Finland

**Abstract:** The libraries have a long tradition in collecting statistical data and other evidence - user survey data etc. - about their operations. In practice, the utilization of data collected may not be as versatile as possible. However, the evidence of effectiveness and impact of library services may be of crucial importance for libraries to survive in the current economic atmosphere.

Hence, we invite library experts around the world to unite their forces to find new good practices to show impact and value of libraries!

In the workshop, we seek together answers to following questions:

-To which quarter do you prove impact and value of your library?

-How do you show that services provided by your library give additional value to your customers/target group?

-What kind of information or data is necessary to collect in order to show the impact and benefits of your library?

The workshop is carried out in 3 sessions with same content during the conference.

**WORKSHOP:** Information Grounds: A field method and design workshop for supporting how people experience everyday information in informal social settings

Workshop Organizer: Dr. Karen E. Fisher, Professor, University of Washington Information School, USA

## **Information Grounds: a field method and design workshop for supporting how people experience everyday information in informal social settings**

*Dr. Karen E. Fisher*

Professor, University of Washington Information School, USA

**Abstract:** Information Grounds are informal social settings where people create, remix, and share everyday information all while attending to another activity—cafes and pubs, hair and tattoo salons, grocery stores, football games, waiting rooms, parks, libraries and book stores, public transport, the beach... online settings too, including Warcraft, Etsy, Pinterest and more. Fisher (writing as Pettigrew, 1999, p. 811), defined information grounds as synergistic “environment(s) temporarily created when people come together for a singular purpose but from whose behavior emerges a social atmosphere that fosters the spontaneous and serendipitous sharing of information,” and later developed propositions and a typology (Fisher, Landry & Naumer, 2007; Counts & Fisher, 2010; [pie.uw.edu](http://pie.uw.edu)). In this all-day, two part-workshop, participants will (a) learn the information ground “people-place-information” conceptual framework and basic field methods for studying information grounds, (b) conduct fieldwork in Rome, and (c) analyze their observations using a design thinking approach that considers how their information ground might be served and utilized by tweaking people, place, information factors via applications, services and policy. Implications for how libraries can be promoted as information grounds are a key highlight. **Note: this workshop is a blast—very conceptual, but practical and hands-on: bring your walking shoes, sun block, note pad/sketch book, digital camera and Euros for espresso and biscotti.**

### **References**

- Counts, S., & Fisher, K. E. (2010). Mobile Social Networking as Information Ground: A Case Study. *Library & Information Science Research*, 32.2, 98-115.
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**WORKSHOP:** LibQUAL+™ in Europe: A Five Year Review of Results and Trends

Identifying Our Customers' Needs and Expectations: A Data Driven Approach and Analysis Through the Use of LibQUAL+™

Workshop Organizer: Michael Maciel, Texas A&M University Libraries, USA

## **Identifying Our Customers' Needs and Expectations: A Data Driven Approach and Analysis Through the Use of LibQUAL+™ (Using Five Years' Data From LibQUAL+™ in Europe)**

*Michael L. Maciel*

**Abstract:** The purpose of this workshop will be to demonstrate how effectively and efficiently libraries can identify their user's needs and expectations. Results from the past five years of European libraries that participated in LibQUAL+™ will be used throughout the program as examples. LibQUAL+™, a user-centered survey and program, enables library users to speak directly about the quality of service they want to receive, access to information they require and the learning spaces they need your library facilities to provide. These insights in turn can be used by libraries to help craft their mission statements, development and market the services they provide and ultimately make very strong cases for funding.

There will be four parts to the presentation.

### **Challenges and Overview**

The current economic and technological challenges that libraries face will be discussed. The question of learning how to keep up with technology, as well as the constant struggle to balance services and information resources will be addressed. An overview of the LibQUAL+™ program, its resources will be presented. Further, it will be shown how from the very beginning, through the LibQUAL+ registration process, the program helps libraries understand the depths and facets of its customers. The workshop will emphasize how effectively LibQUAL+™ can be used to identify and address economic and technological challenges.

### **Implementation and Administration**

The presentation will, using an actual example, demonstrate how to prepare for the implementation and administration of the LibQUAL+™ survey while it is live. Topics such as marketing the survey to ensure successful participation, the review and response to data while the survey is live and understanding the wide inventory of methods available to review your final results will be covered.

### **Methods, Analyses and Presentation**

Methods, analyses and presentation of LibQUAL+ survey results will be discussed. This QOML presentation will demonstrate these methods using aggregated data from European libraries that participated in the LibQUAL+ between the five years of 2008 through 2012. The review will include comparisons of results by user groups, results by category, usage analysis, and a trends analysis over the past 5 years.

### **Survey Results: Distribution and Marketing**

This presentation will discuss the distribution and marketing of the survey results to the libraries' internal customers (e.g. service departments, acquisitions and cataloging departments, and information technology departments), its external customers (e.g. colleges, schools, departments and student groups), and to the institution's administration.

**Conclusion**

The presentation will conclude by once again addressing the myriad of challenges a library faces, the solutions that LibQUAL+™ can provide and, finally, the need for an ongoing commitment to assessing user needs and expectations.

**WORKSHOP: User Satisfaction Surveys in Two Italian University Libraries: Model, Results and Good Practices**

Workshop Organizer: **Dr. Ilaria Moroni**, Milano-Bicocca University Library, Italy

**User Satisfaction Surveys in Two Italian University Libraries: Model, Results and Good Practices**

*Dr. Ilaria Moroni,*

**Abstract:** We introduce a user satisfaction survey carried out in the Milano-Bicocca University Library and in the Siena University Library in 2012, which is significant with regard to several aspects: we applied a conceptual model transferable to different library contexts (public, academic, and school libraries); we used quantitative and qualitative research methods; we tested a survey tool useful for any academic library; we compared the survey findings of the two university libraries, doing an external benchmarking; we also did an internal benchmarking as for Milano-Bicocca, comparing these results with those found in previous surveys; we communicated and shared quantitative and qualitative survey results, and eventually found possible improvements, thus achieving good practices.

**Keywords:** Quality evaluation, User satisfaction, Quantitative methods, Qualitative methods, Surveys, Continuing improvement, Academic libraries, Library services, Case study, Good practices

**WORKSHOP: The embedding of Information Literacy in primary education; case study from the Netherlands**

Presenter: Ms. **Maike Toonen**, Advisor Life Long Learning, Netherlands Institute for Public Libraries, The Netherlands

**The embedding of Information Literacy in primary education; case study from the Netherlands**

*Maike Toonen*

**Abstract:** In this session I will tell something about the large-scale national project “The Library *at school*” (De Bibliotheek *op school*) that is coordinated by the Netherlands Institute for Public Libraries (SIOB).

**About the Library *at school***

Within this project primary schools, communities and libraries cooperate to improve the quality of primary education. It concerns a structural multiannual cooperation especially aimed to promote the pleasure in reading, the stimulation of the language development and the improvement of Information Literacy skills of primary school students.

By setting up a joint strategy and to use proved services and programs of several libraries, the school becomes a ideally read and Information Literacy environment. An environment in which reading and information literacy are getting enough attention by which the learning outcomes of students improve significantly.

**What we do especially for Information Literacy**

We are developing a curriculum focused on Information Literacy which is closely connected to reading. The message is that if you don’t have sufficient reading skills, you don’t understand what you are reading and therefore you won’t be able to contextualize the information sources children need to make papers and reports. Besides: Information Literacy gives the children the basis to participate fully in today’s information society.

**Type of session:**

Presentation of a case study of a large scale national project in the Netherlands for local public libraries.

**Time for the presentation:**

Twenty minutes (without questions)

## Abstracts

### **Academic library use and undergraduate engagement and persistence at a large public research university**

*Dr. Meredith Taylor*

Assistant Director for Organizational Development, University of Texas at Austin Libraries, USA

**Abstract:** Once considered the “heart of the university,” many academic libraries are facing heightened pressures to prove their relevance and value to administrators, faculty and students, especially during these times of constrained resources and greater calls for accountability and productivity in higher education. At the same time, colleges and universities are continually striving to understand how their institutional environments affect undergraduate engagement, persistence and ultimately, degree attainment. As a fundamental co-curricular resource, it is time for academic libraries to start systematically assessing how they affect, either directly or indirectly, their parent institutions’ goals of student engagement and persistence.

This presentation will describe the methodology and results of a quantitative study that was undertaken to investigate the relationship between the use of an academic library, its resources and spaces, and student engagement and persistence at a large public research university. This unique study combined institutional and library data sources for analysis, including the results of a large-scale student experience survey with over 13,000 respondents, data from the student information system, and library-use data from a variety of library data systems. This study thus applied a new methodological approach to the investigations of how library resources and spaces may affect student success outcomes, an area which has received little attention from previous researchers

**Keywords:** Research library, Library use, Undergraduate, Engagement, Persistence

### **Access to Information and his relationship with library services from a user’s perspective: a preliminary study**

*Egbert J. Sanchez Vanderkast*

National Autonomous University of Mexico, Mexico

**Abstract:** Access is a term which has undergone many changes according to the library literature. ICT’s technology has made those changes more visible and reliable. So today user’s see access to information from a different perspectives than user’s do two decades ago.

There is a strong relationship between access to information and library services, and this has as result that every library user’s have their own perception of the mentioned.

Due this, a 23 items questionnaire was hand out to one hundred of students of two faculties (chemistry and Administration) of the UNAM.

The analysis of those findings will be discussed primarily:

1. A possible consensus over the description of the term access.

2. Their own definition of access to information.
3. How they related Access to Information with Library Services.

**Keywords:** Information access, Qualitative methods, Library services

## **Acquisition and organization of musical resources in National Library & Archives of I.R. of Iran**

*Reza Khanipour<sup>1</sup>, Soheyla Faal<sup>2</sup>, Mahbube Ghorbani<sup>3</sup>*

<sup>1</sup>Director General of Processing Department, National Library & Archives of I.R. of Iran, Iran

<sup>2</sup>Head of Non-book Resources Section, National Library & Archives of I.R. of Iran, Iran

<sup>3</sup>Deputy of Director of Processing Department, National Library & Archives of I.R. of Iran, Iran

**Abstract:** This study explores the situational of the musical resources from the aspect of organization and cataloging in NLAI. In this research, which is a case study, the musical resources records in National Bibliographic Database of Iran that consist the research community, will be explored on the basis of four indicators: language, resource type, production year and the subject. The methodology of the research is survey one and the tool of gathering information is a check list. Researchers intent to answer the research questions and using the results and analytical and descriptive evaluate musical resources collection to present recommendations for enriching, empowering and promoting the qualification of organization of the musical resources in the NLAI according to the end user's needs.

**Keywords:** Musical resources, Iranian music, Foreign music, Acquisition, Organization, Cataloging, Bibliographic control, National Library & Archives of I.R. of Iran

## **After-hours library services: needs and patterns of use at Tshwane University of Technology**

*Rirhandzu S. Mhinga, Vivian Agyei*

Tshwane University of Technology, South Africa

**Abstract:** It is a given to students that academic libraries should provide after-hours services. The need for academic libraries to open for longer hours for use by their primary clients is becoming more widespread by the day, in order to accommodate students in their varying study, learning styles and preferences. For LIS to equitably provide for its primary clients' needs, of accessing the library after-hours, the university library introduced after-hours services in 2007 and extended access by appointing both librarians from other institutions and organizations on a part-time basis for professional service delivery and student assistants to assist the professionals.

Based on the above, the Library and Information Services (LIS) was then faced with many challenges regarding the quality of service provided after-hours. The TUT LIS had to investigate the students' needs in its strides to convince the university management that the library needs to offer professional information services after-hours by permanent qualified staff. This paper is based on an investigation of what students want to do and what their expectations are of the service that is provided by the LIS after-hours. The investigation was conducted to assist the LIS managers to enhance after-hours services



offered and for better management. Also, the findings will be presented to the university management to revisit the current model for an option that can enhance after-hours information service provision.

Questionnaires were used to gather data pertinent to the study. This paper provides insight of what the students expect the LIS to offer after-hours and the level at which the expectations should be met.

Tshwane University of Technology is an 8 year old university born of a non-voluntary government merger of three former Technikons in 2004. It has campuses in three South African Provinces namely Gauteng, Mpumalanga and Limpopo. Upon the merger, the library services also had to merge with the parent institutions.

## **aiSelections: computational techniques for matching faculty research profiles to library acquisitions**

*Peter M. Broadwell<sup>1</sup> and Timothy R. Tangherlini<sup>2</sup>*

<sup>1</sup>Digital Initiatives and Information Technology, U.C.L.A. Library, USA

<sup>2</sup>Scandinavian Section and Department of Asian Languages and Cultures, U.C.L.A., USA

**Abstract:** As institutional libraries of all sizes work to make more efficient use of available funding by adopting focused, “on-demand” acquisitions policies, subject librarians and other selectors will benefit from sophisticated computational approaches that help to identify the monographs, serials, and electronic resources that are likely to receive the most use, thereby reducing the processing and storage expenses incurred by interlibrary loan requests, special orders, and unused materials. At present, the selection profiles offered by some major international vendors support only vague and rudimentary filtering of potential acquisitions; much more can be done to take advantage of the growing body of computational research dedicated to analysing and finding similarities within large corpora of heterogeneous documents, as well as related studies of citation networks among researchers.

In this paper, we describe a pilot study in which we collected faculty biographies, publications, and curriculum descriptions from a specific university humanities department and applied computational text-processing and summarization techniques including lemmatization, Wordnet-based keyword detection, and term frequency-inverse document frequency calculations to derive a detailed research and teaching profile of the targeted department. We then obtained vendor records of potential monograph selections in the department’s general subject area for the past several years and used further data-mining algorithms such as weighted Jaccard similarity comparisons to rank the potential selections according to how well their summary data matched the department’s research and teaching profile. To evaluate the effectiveness of these techniques, we consulted the library circulation statistics, interlibrary loan records, and purchasing receipts from the period covered in the study and projected the degree to which our various computational approaches would have improved selection accuracy. The metrics we considered included both financial assessments – i.e., whether the computer-assisted selections process would have resulted in lower acquisitions and borrowing expenditures overall – and resource utilization measurements, which evaluate the degree to which resources in the collection would have circulated more frequently on average, indicating a greater degree of fulfilment of the scholarly interests of students and faculty. We conclude by offering guidelines for implementing our computational techniques at academic libraries, as well as suggestions for expanding this research into other subject areas and types of library resources.

**Keywords:** Selections, Computation, Matching, Data mining, Research profile

## **Algerian university libraries and the digital age: new communication behaviors**

***Radia Bernaoui<sup>1</sup>, Mohamed Hassoun<sup>2</sup>, Rosa Issolah<sup>3</sup>***

<sup>1</sup>Maître de conférences (Lecturer) in Information and Communication Science- ENSV, Algiers, Algeria

<sup>2</sup>Professor in Information and Communication Science, ENSSIB, ELICO, Lyon, France

<sup>3</sup>Professor in Information and Communication Science, ENSA, Algiers, Algeria

**Abstract:** Scientific and technical information across the world has led to a veritable globalization of knowledge through the production, visibility and dissemination of knowledge and skills produced by researchers and research establishments. In the digital era, these changes have given rise to the existence of several communities or consortia in higher education in order to bring users closer. Various changes linked to advancement in information technologies have changed work methods and behavior amongst professionals in the information and communication sciences field. Our preliminary survey reveals that the Algerian university libraries studied wish to create a community of exchange and collaborative work between professional colleagues in this new digital age.

**Keywords:** University library, Digital, Digital library, Communication, Collaborative work, ICTs, Algeria

## **Analysis of scientific activities in the field of Information Science: the case of Croatia**

***Nikolaj Lazić<sup>1</sup> and Jadranka Lasić Lazić<sup>2</sup>***

<sup>1</sup>The University of Zagreb, Faculty of Humanities and Social Sciences, Department of Phonetics, Croatia

<sup>2</sup>The University of Zagreb, Faculty of Humanities and Social Sciences, Department of Information Sciences, Croatia

**Abstract:** The journal is the basic medium of scientific communication and one of the most widely used sources for bibliometric analysis. In this paper, we will address the scientific activities in the field of information science in Croatia by means of bibliometric analysis of 1418 papers published in social sciences journals listed as references for promotion of scientists through academic ranks in the field of information science. Based on a list of scientific journals and specificity of scientific publishing in national and international scientific journals we will show trends of scientific activities. When it comes to the evaluation of scientific papers it is not the same whether the paper is published in national or international journals. A paper published in a national journal in native language is not evaluated the same (no matter how highly rated paper is) as the paper published in an international journal. For small countries and their languages (which we certainly belong to) an important indicator of the value of the journal is its representation in relevant databases. The possibility that a journal published in national language by an undersized publisher from a small country will enter relevant databases is certainly not the same as in cases when the journal is published in English by a large publisher from a country with strong scientific tradition. The majority of countries where English is not native language seek representation, visibility and recognition through its

scientific production in citation indexes. This recognition is measured by the presence of national journals in citation indexes.

By the analysis of SSCI, which consists of journals from around the world and all disciplines, we will show the dominance of journals published in English speaking countries and also journals published by major publishers. So actually national journals whose publishers are "small" have no chance of survival because in the evaluation of scientific excellence needed for the academic promotion they have "little" value and are thus avoided by scientists. If we are planning to stimulate our own scientific production in our national language it is necessary to set the criteria which will particularly evaluate papers published in national language when planning scientific policy and the development of science.

The purpose of this study is to highlight the need for a new evaluation model and stimulate scientific research in the field of information science in the national context.

**Keywords:** Bibliometry, Information sciences, Assessment, Scientific publishing

## **An analysis of the cultural and social factors influencing citation behaviour of Iranian medical scholars**

*Ali Rashidi*

Department of Information Sciences, School of Medicine, Urmia University of Medical Sciences, Urmia, Iran

### **Abstract:**

**Objective:** to find out possible reasons for the paucity of the rate of co-citation among Iranian medical researchers.

**Methods:** the 516 responses of 1000 randomly distributed questionnaires were analyzed to test the postulated hypothesis.

**Conclusion:** Alongside accessibility to internal publication, Iranian researchers' bias towards foreignlanguage articles and deliberate non-citation because of cultural bias and personal motivation are thought to be factors which influence internal co-citation.

## **Altmetrics: a case study on information practices of humanities scholars**

*Anna Maria Tammaro*

University of Parma, Italy

**Abstract:** The presentation focuses on a case study of information practices of humanities scholars in Italy. It is based on a survey promoted and financed by FondazioneRinascimentoDigitale and on the findings of a later investigation of humanities scholars in the University of Parma. Peer review is the preferred evaluation methods in the humanities, limited however to the published traditional literature and used as pre-publication filter. It is supposed to be a "subjective" judgment and often combined with more objective measures of impact for published academic work (Impact Factors, h-Index). Altmetrics is expanding the notion of scholarly community, where

scholars are increasingly communicating over the Web and scholarly publications are more and more digital and interdisciplinary. The methodology is based on the observation of the information process. The Ellis model of information seeking has been used including: searching, collecting, reading, writing and collaborating, with two or more primitives distinguished for each activity. Additionally, in the electronic environment "the flow of seeking, using, and creating information" is becoming seamless and interdisciplinarity of digital publications is observed (Borgman 2011). The findings can demonstrate that Altmetrics measurements are not just the products of judgments and biases on the part of publishers and a closed scholarly community; they are powerful descriptions of aggregated scholarly activity that enable a kind of self-understanding, facilitating the evaluation of impact.

## **Analysis of journal usage by Wageningen UR research groups via article references**

*Marco G.P. van Veller*

Wageningen University and Research Library, The Netherlands

**Abstract:** The research activities of Wageningen University and Research (or Wageningen UR) are concentrated around food and food production, living environment and health, lifestyle and livelihood. To facilitate the scientific information access of Wageningen UR staff members, the library strives to provide a balanced collection of relevant journals. For such a balanced collection, appropriate collection management is a necessity.

For information on journal usage by staff members of Wageningen UR, the library has developed an alternative analysis based upon information from article references. An inventory is made on a yearly basis of the journals from which articles are listed in the references of articles published by Wageningen UR staff in the three previous years. For each of the inventoried journals the number of times (abundance) articles from this journal are included in the references of the published articles is counted. The published articles are collected from Wageningen UR's institutional repository, which contains updated affiliation information for the authors of the articles. The institutional repository also contains, for each published article, a link to its corresponding Web of Science record for collecting information on the articles' references.

The use of the institutional repository, in combination with Web of Science, as input for this alternative analysis enables customized, evidence-based measures of journal usage by Wageningen UR as a whole or parts thereof (e.g. research groups). Customized lists of accessed journals can be used by staff members to select journals that are relevant for their research. The library uses the lists to evaluate its journal collections and allocate costs to organizational units of Wageningen UR.

Customized lists of used journals also can be applied in a similarity analysis of journal usage by different research groups. Via cluster analysis and mapping this similarity in journal usage by research groups can be visualized over time.

**Keywords:** Collection management, Article references, Journal usage, Research groups, Cost allocation, Similarity, Mapping

## **App advisory in research library websites: a preliminary study**

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**Abstract:** This preliminary study examines the websites of U.S. research libraries in one consortium, the Committee on Institutional Cooperation (CIC), to determine the extent and variety of online app advisory services these libraries provide to patrons. App advisory, for the purposes of this study, refers to any suggestions of downloadable mobile applications (whether for phones, tablets, or other devices) for use by patrons. This still emerging phenomenon needs systematic study. I explore how these institutions provide app advisory content on their websites, and the kinds of apps included in their recommendations. The paper will also explore the methodological problems in discovering this content through the many layers of library websites, and areas of interest for further study.

**Keywords:** Mobile apps, Website analysis, Research libraries

## **An application of the technology acceptance model (TAM) to Faculty acceptance of electronic resources at the Colleges of Applied Sciences in Oman**

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**Abstract:** The Technology Acceptance Model has been widely used to determine the success and failure of ICT initiatives. The TAM explores factors that affect behavioral intention to use technologies applications and electronic resources which are provided through different information systems. Although the model focusing in two key variable: perceived usefulness and perceived ease of use; it provide flexibility in using other external variables that equipped with organizational culture and behavior of problem situation under investigation.

In this research, TAM will applied to a study of faculty acceptance of electronic resources at the College of Applied Science in Oman. Faculty in six colleges will be asked to determine to what extent the two variables: perceived usefulness and perceived ease affect them in their behavioral intention in using the electronic resources. In addition, several external variables that are related to organizational culture of the Colleges of Applied Sciences will be applied in this research such as the affect of language, age, and technical support in using the electronic resources.

A Questioner will be used to collect the data and achieved the objectives of the current research. The significant of this research is that evaluating the effectiveness of using TAM in library domain especially in developing countries such as Oman.

## **The application of Balanced Scorecard concept in a new national project**

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**Abstract:** The paper tells the story of the emergence of an important and large national project (*Assuring national electronic access to scientific literature for supporting and promoting the research and education system in Romania- Anelis Plus*). Its goal is to develop the research capacities and to integrate the Romanian *research-development-innovation system* to the international scientific environment by ensuring the continuity of access for the Romanian scientific and academic community to electronic scientific resources of information & documentation and developing specific methods for sustaining the research and promotional activities of Romanian researchers' work.

The main actor is the Association of the Universities, Research and Development Institutes, and the Central University Libraries in Romania "*Anelis Plus*" (*A+*) including 83 members – 47 universities, 31 research & development institutions and 5 university and academic libraries.

As a professional and scientific association, *A+* mission is to fulfil its members' information and documentation needs, to undertake research and development activities, to purchase electronic resources of information and scientific documentation for education and research, to undertake promotion and study activities necessary for the implementation of the educational and research policies, so as to answer to the growing information needs of the Romanian users.

How *A+* meet the project objectives *or* about the services offered and not only:

» The business model - one of the first services offered by the Association to its members was the proposal of a *co-financing model*, depending on the size of each institution (FTE).

» In the context of the appearance of new evaluation criteria for the scientific research, *Anelis Plus* supplies services such as the correlation between the Thomson scientometric indicators and those used in the evaluation of the scientific research from Romania (According to Romanian legislation, there is estimated and taken into consideration when evaluating the scientific research the *relative influence score* for the ISI quoted journals).

» Implementation of a *virtual campus* with various types of data, with different possibilities of access.

The virtual campus is the one-stop sign-in portal allowing the community to access the scientific electronic resources and the updated information about these and the available services and also to facilitate the collaboration between scientists to exchange information.

Within the portal, the scientific publications will be organized in two categories: publicly available for open-access (i.e. direct results of the scientific production - research papers, dissertations, PhD thesis, offered with full consent of the authors) and restricted access (purchased e-publications). The OA resources are expected to grow and will be the main component of the *national repository of documents*.

There will be also links to Romanian Editorial Platform SCIPPIO, Central Publication Platform for Grey Literature for Romanian Universities (ROMDOC), OA institutional repositories hosted by Romanian university libraries.

The most important facilities of the portal should be available for the mobile version. Portal operation will be supported by using the research and education network in Romania - RoEduNet.

Within the project activities will be developed a model which will introduce the BSC concept; the following perspectives will be considered: resources, access and infrastructure; use and users; efficiency; potential of improvement and development.

Conclusion

The paper highlight the specific benefits for each category of users: teaching staff, researchers, students and university libraries.

The Project is conducted by observing the Code of Good Practice for Current Research Information System, which facilitates knowledge transfer and holds a major role in the potential incorporation of European research databases, in order to achieve higher quality usage of information systems by more and more demanding users, increased

interoperability between multiple systems and decreasing their operational costs, as well as minimizing the effort required by information exchange.

**Keywords:** Romanian consortium, Balanced Scorecard, Electronic resources, Scientific information and documentation

## **Applications of Semantic Web over library services in digital era: from KOS perspective**

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**Abstract:** This article presents the overview of Semantic Web (SW) and its applications over the library services in the digital era from the Knowledge Organisation Systems (KOS) perspective. It provides various examples of such use cases and also tries to address semantic interoperability issue. The latest trend shows lot of research is happening from the point of Semantic Web including Linked Data, Cloud Computing, Cyberinfrastructure and applications of Service Oriented Architecture (SOA) in DL arena.

The growth of digital information over the Web including Digital Libraries (DL) and Electronic Theses and Dissertations (ETD) is tremendously increasing over a decade; this led to more complexity in organization of information. Due to this complexity, information organization, its retrieval and the interface showing search results have posed challenging environment to the information scientists in these research areas (Gunjal & Urs, 2010). Access to digital materials continues to be an issue of great significance in the development of digital libraries. All digital libraries use one or more Knowledge Organisation Systems (KOS). Developing a suitable KOS model for the networked digital libraries poses significant challenges to information specialist worldwide.

The term "Semantic Web" refers to W3C's vision of the Web of linked data. Semantic Web technologies enable people to create data stores on the Web, build vocabularies, and write rules for handling data. Linked data are empowered by technologies such as RDF, SPARQL, OWL, and SKOS. "The Semantic Web is not a separate Web but an extension of the current one, in which information is given well-defined meaning, better enabling computers and people to work in cooperation." It is a source to retrieve information from the web (using the web spiders from RDF files) and access the data through Semantic Web Agents or Semantic Web Services.

Libraries that manage information through Web 2.0 applications can also provide knowledge. With the changing needs of users, libraries have enhanced their function as Knowledge Centers, so it is natural that libraries would embrace Web 2.0 functions because of their ability to enhance knowledge sharing (Gunjal, et.al. 2012). Digital libraries have become commodity in the current world of Internet. The next generation of digital libraries combines technological solutions, such as P2P, SOA, or Grid, with recent research on semantics and social networks. These solutions are put into practice to answer a variety of requirements imposed on digital libraries (Kruk & McDaniel, 2009). According to Kruk, et.al. (2006) - Semantic digital libraries (SDL) helps to (i) integrate information based on different metadata, e.g.: resources, user profiles, bookmarks, taxonomies, (ii) provide interoperability with other systems (not only digital libraries) on

either metadata or communication level or both and (iii) delivering more robust, user friendly and adaptable search and browsing interfaces empowered by semantics.

Ibekwe-SanJuan and SanJuan (2010) observed in their KO research study, results showed that while topics in the first decade (1988-1997) were more traditional, the second decade (1998-2008) was marked by a more technological orientation and by the appearance of more specialized topics driven by the pervasiveness of the Web environment.

The W3C Library Linked Data Incubator Group (2010-2011) intended to focus on the benefits of linked-data technology to libraries. Parker, S (2010) states Linked Data is part of the vision of the semantic web to enrich the structure of the Web by embedding semantic annotations into data to improve the quality of search, collaboration, publishing and advertising and enable applications to become more integrated and intelligent. Linked Data is a way of making information available easily and efficiently over the web and it is open, modular and scalable. This can also be combined (mashed-up) with other pieces of linked data, with the option of adding more to existing data even when the terms and definitions used change over time. The Resource Description Framework (RDF), a W3C standard for describing resources in the Web and a major component and serves as the "interconnection bus" for current data formats. RDF uses Uniform Resource Identifiers (URIs) to allow the linking of things and concepts and helps to identify a resource on the internet. Digital Libraries can benefit from RDF to facilitate digital resource management and support knowledge management for an interoperable information environment like that found in a digital library (DL).

The Semantic Web is not a separate web but an extension of the current one. The goal of Linked Data is to enable people to share structured data on the Web (Bizer, et al., 2007). The term Linked Data was coined by Tim Berners-Lee (2006) in his Linked Data Web architecture note. The term refers to a style of publishing and interlinking structured data on the Web. The Linking Open Data (LOD) initiative emerged around 2007 as part of the Semantic Web Education and Outreach Interest group (SWEO) of the W3C. Its objective is to make large amounts of RDF data available on the Web, not in isolated islands, but as a Web of interlinked datasets. This initiative seems to be one of the most promising applications of the Semantic Web for libraries today, because short term results are possible.

A rising number of actors in librarianship and its related fields are experimenting with Semantic Web technologies and Linked Open Data (LOD). The LOD cloud as a whole grew by 300% in 2010, whereas the amount of data relevant for libraries grew by nearly 1000%. For many, the question now arises how to integrate their holdings into the LOD cloud and how to embed externally provided LOD data into their own applications, adding value through cross-domain linking. The first conference day will focus on the corresponding infrastructure requirements.

Bizer, et.al. (2011) indicate that in linked data, there is enormous growth of the Web of Data since 2007 to till date and also the growth of datasets increase shows 12 (2007) to 203 (2010) in numbers at the rate of 300% growth year. They also elucidate the growth by domain during 2009-2010 and libraries domain itself shows the growth of 955%.

Linked Open Services (LOS) are an approach to exposing services, that is functionalities, on the Web using the same technologies that are associated with Linked Data, in particular HTTP, RDF and SPARQL.

#### *Applications of Semantic Web (SW):*

Some of the applications of Semantic web using linked data over library services such as AGROVOC multilingual thesaurus, LCSH, BNB, DDC, VIAF by LoC & OCLC and so on.

Semantic search engines use SW technologies and perform visual search, navigation and querying of large public interlinked datasets within the Web of Data. Few such examples are: Sindice, SIG.MA, VisiNav system

At the end this article concludes with the Semantic interoperability issue. Semantic interoperability plays a central role in information communication; it has a direct impact



on a whole range of interoperability issues. The proliferation of repositories, interfaces, metadata models, and semantic technologies accentuates the need for semantic interoperability. The open, networked environment encompasses multiple user communities that employ a plethora of standards for describing and providing access to digital resources. To enable federated searches and to facilitate metadata sharing and management, many efforts have been initiated to address interoperability issues, to overcome numerous obstacles, and to address problems encountered along the way. XML, RDF, RDFS, OWL, and SKOS are the high-level standards that will enable the achievement of semantic interoperability in the networked environment (Zeng & Chan, 2010).

Patel, et al. (2005) report formulates that, in the current digital library technology, one can clearly distinguish 3 levels of information such as - Data structures, Categorical data and Factual data. They indicate that, there is no doubt that semantic interoperability is crucial to the next generation of digital libraries, and as mentioned earlier in this report, it has been widely identified as such [NSF Workshop, eGovernment 2004, EIF 2004, OntoGov 2004]. It is therefore essential that issues relating to semantic interoperability be considered as an inherent part of future Digital Library research and development.

**Keywords:** Semantic Web, Knowledge Organisation Systems, Digital libraries, Linked Data, Linked Open Data

## **Apply novelty detection to Chinese news event detection and tracking**

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**Abstract:** With the popularity of the Internet, electronic news has become one of the main sources to acquaint with the world for most of the people in recent years. Due to the flourish of electronic news websites, there exist a lot of redundant news reports. Previous researches adopted Multi-Document Summarization to solve the problem, but its performance is limited because of low cohesion, low completeness, and high redundancy of content. In this research, we intended to apply novelty detection that extracts not only relevant but also novel sentences from each news document. Moreover, the design of novelty detection is not static; it will remove sentences according to what the user has read. Two kinds of novelty detection: cosine similarity and named-entity were adopted in the experiment. The result shows that though cosine outperforms named-entity on F-measure and recall, named-entity performs better than cosine on precision. Eighty percent of subjects agreed that most redundant information were correctly filtered out by our system. It is hoped that with the help of novelty detection, users can save their time by reading only the novel part of news.

**Keyword:** Novelty detection, Event detection and tracking, Text summarization

## **Archival discoveries through cultural memory: undergraduates in the archives**

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**Abstract:** In the past few years, university libraries across North America have begun taking steps to introduce undergraduates to archival research. At the E.J. Pratt Library at

Victoria University (in the University of Toronto), staff assists students in the VIC184 Cultural Memory Project, a course assignment that requires students in the first year of university to work with a collection of archival papers towards producing an oral report and a final paper at the end of the academic term. The learning outcomes in this process allow for the transformation of the undergraduate from a receptor of secondary sources to a B"knowledge creatorB": Students in VIC184 rely on primary source documents in the archives to form their ideas of the person who they have selected to research. Library staff plays a fully active role in the course from providing instruction for accessing and using archival materials and learning along with the students about the individuals whose lives are explored.

The session will entail a description of the course VIC184: Individuals and the Public Sphere: History, Historiography and Making Cultural Memory at Victoria University (in the University of Toronto), the involvement of library staff in instruction in the use of archival materials and the results of using primary source material as reflected in the papers produced by undergraduate students.

**Keywords:** Archives, Libraries, Cultural memory, Undergraduates, Primary sources

## **Are alternative metrics still alternative?**

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**Abstract:** Whether new metrics for measuring impactful research are alternative (i.e. "altmetrics"), or gaining enough usage to be "normal" is up for debate. But, what is known is that the way scholars and others are interacting with research is rapidly changing. Libraries can be at the forefront of providing new ways of evaluating research and thus recapturing a vital role in the research process.

**Keywords:** 5-10 altmetrics, Article-level metrics

## **Aspects of authorship, coauthorship, and productivity in School Library Research 1998-2012**

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**Abstract:** The purpose of this study is to examine authorship and coauthorship characteristics in the approved and published articles in *School Library Research*, formerly known as *School Library Media Research*. The original paper, written to fulfill the requirements to receive the MLIS degree from the University of Southern Mississippi, has been updated to include fifteen (15) volumes spanning fifteen (15) years. The findings support studies that report a general trend by scholars to engage in collaborative efforts that appear to increase coauthorship activity. Unlike previous studies, this study indicates that female authors' contributed and coauthored more articles

than their male counterparts. The findings support previous studies that found (1) little or no contributions by school librarians in preeminent journals in library and information science literature and (2) library science faculty among the heaviest contributors to library and information science literature. The study was conducted to provide information about the scholarly communication that is taking place in a professional journal whose focus is school librarianship. It identifies major contributors to school library literature, publication patterns and communication trends that have and are currently taking place, and encourages future research.

## **Assessing Information Literacy skills among undergraduates: the case of Food Technology and Nutrition School at the Alexander Technological Educational Institute of Thessaloniki**

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**Abstract:** The purpose of this study was to assess Information Literacy (IL) skills among students in the School of Food Technology and Nutrition at the Alexander Technological Educational Institute (ATEI) of Thessaloniki in order a) to provide user- centered IL Library courses based on specific discipline and subject according to the students' information needs; b) to facilitate the design and implementation of the new web based IL tutorial *Callisto*; c) to demonstrate the need for integrating IL Library courses into the two academic departments of the school, the Department of Food Technology, and the Department of Nutrition and Dietetics; d) to explore students' self-efficacy belief in IL. A questionnaire was designed and distributed to undergraduate students of all semesters during the academic year 2012-2013 in both departments of the School in order to collect quantitative data. Results indicate that a large amount of students of all semesters show insufficient or no knowledge of basic IL skills in all fields of a research process. They show a limited ability in putting together a research strategy, in distinguishing and using library research tools, in evaluating retrieved results, in conducting a research paper, in using results in a legal and ethical way and in conducting bibliographic references. The survey also examined self-efficacy perception of students in the specific departments. Results indicate that students obtain a positive perception of self-efficacy regarding IL skills.

The value of this study has to do with a) the assessment of specific IL skills among students of all semesters, and b) students' self-efficacy perception for IL skills, both in this particular School of ATEI. Therefore, user-centered - according to specific discipline and subject - improvements in IL Library programs can be designed and implemented, in order to meet sufficiently students' IL needs.

**Keywords:** Information Literacy, IL, Skills, Assessment, Self-efficacy, Academic libraries, Undergraduates, Greece, Alexander TEI of Thessaloniki, ATEI of Thessaloniki, School of Food Technology and Nutrition

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## **Assessing library impact on student learning outcomes: a case study using the Understanding Library Impacts protocol**

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**Abstract:** This paper reports on a project using the Understanding Library Impacts (ULI) protocol to assess library contributions to undergraduate student learning at Barnard College. The ULI protocol is a suite of library assessment instruments intended to help colleges and universities understand how students use information services and resources to achieve discipline-specific and general education student learning outcomes (SLOs).

In 2012, Barnard College initiated an undergraduate program designed to help students acquire Empirical Reasoning (ER) competencies. ER competencies encompass the interdisciplinary skills needed to analyze and use quantitative and qualitative data to support arguments, conduct independent research, and solve real-world problems. College graduates need these critical skills to participate fully as citizens and to thrive in the 21st century workplace.

The Barnard College Library created the Empirical Reasoning Lab to support the ER curriculum with funding from the Andrew W. Mellon Foundation. Led by a Data Librarian, the library's Empirical Reasoning Lab (ERL) provides instruction, point-of-need service and support, and dedicated computer lab space to help students engaged in ER coursework. In this 3-year grant, Barnard College Library is partnering with several social sciences faculty members and departments to create and support the ER curriculum.

In this project the ULI protocol has been adapted to examine student use of library and ERL services during ER assignments and projects in several social sciences disciplines. A critical incident technique questionnaire examines information use during academic coursework. A separate curriculum mapping component aids analysis by linking information use to faculty-defined SLOs and their assessment. Quantitative and qualitative data are gathered to demonstrate the ERL's contributions to student learning and to generate user stories to support formative assessment and advocacy for the ER curriculum.

Libraries are increasingly partnering with teaching faculty to support student learning throughout the academy. This project demonstrates an approach for assessing and articulating the library's contributions to these partnerships in terms of student learning. This paper will present methods used in the project, share preliminary findings from its first year, and discuss future plans.

**Keywords:** Library assessment, Student learning outcomes, Data literacy in libraries, Critical incident technique

## **Assessing of job satisfaction of the health library professionals in Dhaka, Bangladesh**

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**Abstract:** Job satisfaction is an important area to determine the view of the health library professionals towards their job in the library. Research on job satisfaction of library professionals in Bangladesh very small in other words in the health sector is lacking. In order to understand job satisfaction of library professionals, this study has to be taken into consideration. The study has been under taken to assess the level of job satisfaction of the health library professionals in Dhaka in terms of demographic and job related factors and how do the job facets (MSQ, 1967) affect on job satisfaction. There is a cross sectional observational study to see the level of job satisfaction among health library professionals. Survey was conducted among eight health libraries in Dhaka city. All library professionals were included in the study and size of the population is 160 working in health libraries and among them 38 was asked to participate in the study. Primary data was collected by using questionnaire and a structured tool was divided by two sections: Section-I used to measure the level of job satisfaction of the health library professionals and it included the short form of Minnesota Satisfaction Questionnaire. Section II was designed to collect personal information. The Student's 't' test, and 'Z' test statistical methods were used to test the hypothesis. Specific empirical findings are: There are high and moderate levels of job satisfaction found in the health library professionals. None of them are less or dissatisfied with their job. There is a diverse relationship between job satisfaction and background variables. Nearly all of the job facets are influenced on the level of job satisfaction of the library professionals. There is no significant relation between job satisfaction and kind of institution. The role and function of health library professionals in library services is a subject that has generally not received adequate attention in the country. The professionals of these libraries suffer from a lacking of legal underpinning. In other words, their function is surrounded by several problematic areas which in turn have an unfavorable effect on their motivation and perception towards job. Although this study has found that there is no less satisfaction exists in these professionals but care must be taken to develop the primary principles of job satisfaction in terms of various job related factors. These areas might be increased easily at the job satisfaction level in the health library professionals in Bangladesh. The study concludes with some recommendations.

**Keywords:** Job satisfaction, Library professionals, Health libraries, Bangladesh

## **Assessing the effectiveness of collaborative subject-specific library instruction**

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**Abstract:** In the fall semester of 2012, the communication librarian and the business librarian at the University of Arkansas began working together to provide collaborative library instruction. The librarians collaborated on instruction for Communication 1313, a course that focuses on the fundamentals of public speaking. Due to the course being a requirement for business majors, many sections of the course were made up entirely of business students. The business sections were identified, and the librarians worked together to provide instruction to these sections. The instruction sessions included general library information, and information about communications and business resources. In the spring of 2013, the librarians once again worked together to provide instruction to business students taking Communication 1313. Through the use of surveys, the librarians studied the effectiveness of their collaboration efforts. The librarians will present student perceptions about performing library research at the beginning of the semester, and how those perceptions had changed by the end of the semester.

**Keywords:** Academic library, Information Literacy, Collaboration, Instruction, Communication, Business

## **Assessing the quality & effectiveness of library services using the MISO survey**

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**Abstract:** In an environment where libraries are increasingly dependent on information technology, assessing library services in the context of IT brings layered intelligence to data driven decision making. The MISO Survey provides academic libraries comprehensive data on library and technology services in an economic environment where every decision counts. MISO principal investigator and team members will share their experience and outcomes.

**Keywords:** Information technology, Academic libraries, Decision making, MISO survey, Quality of services

## **Attracting undergrads: a study of effective advertising for a virtual-visual generation**

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**Abstract:** Through a series of studies, an applied anthropology class, their professor, and a librarian joined forces to learn about the ways in which students do their research and

where there are gaps in their knowledge of and understanding about library services. The focus has been on the gaps between expressed student needs, their use of library materials and services, and what the library has to offer. What students say they need to complete assignments and research projects and what the library offers are frequently the same, but in spite of efforts to educate them, many students remain unaware of what is available. A frequent comment in focus groups or interviews continues to be I didn't know the library had that!

Each study underscored the need to respond to the behavior of users rather than try to force them to do it our way which typically results in non-use of the library. Furthermore, each study has returned a recommendation that the library needs to do a better job of advertising its services and resources to students. Building on the idea that the library needs to respond to the behavior of users, a cooperative study involving the applied anthropology class students and the library was undertaken in 2011. The study focused on what university students considered the best means and locations to advertise and disseminate library information. Two findings stood out in this particular study: one, that today's students are a visual and virtual generation and two, that paying attention to the ways they respond to advertisements requires the library to utilize the capabilities of information technology.

This presentation/paper will present the work of the students in the anthropology course: the findings, their recommendations, and library responses. Finally, we posit that our behavior as a library can influence student behavior if we market and advertise using methods to which students respond.

**Keywords:** Libraries--ethnographic studies, Information- seeking behaviour, Marketing-libraries, Advertising-libraries, Library users, Advertising-student ideas, Collaborations, Students-virtual and visual, Advertising-- information technology, Academic libraries-marketing, Libraries and students

## Author and indexer keywords comparisons as a method of identifying emerging research topics

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**Abstract:** In this study we applied a keyword analysis over time comparing Author and Index terms in order to track the evolution of new research areas in the field of Energy. Using the corpus of energy related publications from Scopus, a bibliographic database from Elsevier, we retrieved over a million keywords which were assigned to more than 500K publications in this field. Standardization and disambiguation techniques were applied and the Author keywords were compared to Index keywords overtime. Our findings indicate that Author keywords could potentially indicate new topics, methodologies and products when they appear before their adoption by the Index. In this paper we give some examples of this phenomenon with an in-depth examination of a few topics selected from our findings.

**Keywords:** Energy, Emerging topics, Bibliometrics, Content analysis, Author given keywords

# **Awareness and protection of human and electronic library resources from lightning disaster: a survey of selected Nigerian libraries**

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**Abstract:** Disaster prevention and management is a crucial aspect of library management. Creating awareness and protecting human and electronic library resources from lightning disaster require immediate attention of library managers. Lightning strike is a deadly natural disaster that poses serious danger to both human and electronic library resources, hence the need for creating awareness about its threat to human and material resources. This study was focused on creating awareness and protecting human and electronic library resources from lightning strike disaster in Nigerian university libraries. A descriptive survey method was adopted to elicit information from the respondents of this study. A questionnaire was designed with 29 structured questions including the demography of the respondents. Eighty (80) copies of questionnaires were distributed among the staff of the selected university libraries. Seventy two (72) questionnaires returned were all found usable. This study finds that majority of the respondents do not have awareness programme about protection from lightning disaster in their libraries. The study also finds that majority of the respondents are not aware that lightning strike can kill or cause serious health injury. The study also finds that human resources in the libraries require adequate protection from lightning strike and the advent of more electronic ICT equipment in the libraries necessitates the deployment of lightning protection equipment. The study finds that the libraries cannot ignore lightning strike equipment installation as this will be detrimental to the safety of human and material resources. Some recommendations were made based on the findings of the study and conclusions drawn.

**Keywords:** Electronic library, Disaster management, Lightning strike, Protection of human and electronic resources

## **BEIC DL quality features: selection, description and access**

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**Abstract:** Among the wider offer of digital items (and not only), quality is a distinctive feature. The paper aims to depict the BEIC Digital Library, an ongoing project. The BEIC DL aims to make available on its website the most important works of the European culture-and not only. Currently, about 4500 descriptions have been published: they consist mainly in ancient books plus a selection of websites. BEIC DL main features intended to be described in the paper are: items selection, digital objects description and access.



**Selection:** The BEIC DL has been developed with a clear idea of the collections which will constitute it. A team of experts and researchers has selected the most important works in their own field, from literature to science, from theology to hydraulics. Later the best editions in original language have been pinpointed, together with the translated versions. The digital objects are obtained by digitizing the books owned by several libraries; otherwise if an edition was available in a digital version, the BEIC Foundation has contracted with the owner institution the rights to use and publish the digital object.

**Description:** as soon as a digital object enter the BEIC DL, its metadata are enriched by adding uniform title, DDC22, subjects and the controlled form for the place of publication and the publisher. The searching phase is easier thanks to a navigator through which the user may select the authors using their chronological details and the collection their works are listed in.

**Access:** another quality feature consists in the “structural maps”, expressly created by BEIC cataloguers. These maps represent the physical (cover, front page, plates, etc.) and the logical (chapter titles, name index, bibliography, etc.) structure of the document. The structural map is visualized on the digital object side as a kind of summary, supporting the navigation among the different sections of the digital object.

**Keywords:** Digital libraries, Quality issues, Cataloging, Selection, Structural maps

## **Benedictine bibliographical history: a study on the *Livraria de São Bento* - the Old Library of Saint Benedict's Monastery of São Paulo, Brazil, 16<sup>th</sup>-18<sup>th</sup> century**

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**Abstract:** The present work discusses the formation of the Old Library of Saint Benedict's Monastery of São Paulo (known as *Livraria de São Bento*) in the historical and cultural contexts of Benedictine monasticism. To this end, the theoretical-methodological literature comes not only from the historical bibliography but also the identification and analysis of the old books from 16<sup>th</sup>-18<sup>th</sup> centuries, which are part of the Library today. The research indicates the existence of a development policy for the collection guided both by the regulation of monastic life and the prevailing socio-cultural conditions, which were associated with broader objectives of the Portuguese Benedictine Congregation. In this context, the Monastery formed *a library* kept by monk-librarians and composed by various titles and themes. From this study, we understand that the historical and spiritual aspects of Benedictine monasticism constitute the bibliographical, cultural and informational identity of the *Livraria*. “A venerable, regular, dignified and religious place”, the *Livraria de São Bento* is characterised by the dynamics of control and power - aspects that are rooted in its trans-medieval model, recurrent in cloistral libraries.

**Keywords:** *Livraria de São Bento*, Library of Saint Benedict's Monastery (History) - 16<sup>th</sup>-18<sup>th</sup> century - São Paulo, Benedictine libraries, Benedictine librarians, Monastic culture, Historical bibliography

# **Bibliometric analysis: Slovenian Journal of Public Health vs. European Journal of Public Health**

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**Abstract:** Science is cumulative. Science would not exist without the publication of research results. Publishing the results of scientific research is the basic characteristic of the process of scientific information and communication.

The impact of a local scientific journal, which does not lag behind an international journal in terms of quality, in an international area, is possible only if it is concurrently published in English. This maintains professional terminology, enables greater international exposure for the contributors, including greater number of received citations, and according to the criteria of the Slovenian Research Agency (ARRS), higher quality publications.

Apart from the financial support provided by the agency, the evaluation of Slovenian scientific journals is of vital importance. Professional bodies (scientific councils for individual areas) evaluate Slovenian scientific journals, and based on their quality place them on a list of magazines not included in international bibliographic databases, while they are taken into account for the categorisation of scientific publications. Based on the Rules on Procedures of (co)Financing, Evaluating and Monitoring of Research Activities Implementation, Slovenian scientific journals and the publications in them are considered by scientific performance. Such evaluating and scoring in the researchers' bibliographies allows for the preservation of issues and the influx of higher quality scientific articles in Slovenian scientific journals that are published in Slovenian. Despite a magazine not being internationally acclaimed, due to the scoring provided by the rules, the researchers should endeavour to publish in Slovenian, to inform colleagues of their research results in Slovenian, and not only strive for international exposure and recognition.

The evaluation of scientific publications is very difficult. The most valid and objective assessment of a work would be the response from a wide group of experts who would obtain the work after its publication and inclusion in the global flow of information. A method, which would contribute to the evaluation of published works, is a citation analysis. The amount of references to an article, as a measure of its quality, has initiated further research of citations. The results of these studies are ideas that the frequency of references to scientific articles can be used as a criterion in their evaluation, as an aid for decision-making in research work management in the evaluation of scientific journals, in the selection of a magazine best for publishing an article, and in assessing the success or research work of individuals and groups. We must realise that citation analysis measures only the response a work would trigger in the global scientific community and with it the quality of research work, but not the assessment of the entire activity.

The effort invested by an author in the preparation of a publication, is the same for a publication in an international or a local scientific journal. Regardless of where the research work is actually published, the authors more frequently choose to publish in prestigious international scientific journals. The reputation criterion for a scientific journal is the citation index. The difference is probably whether publication in a prestigious international journal is really a sign of the publication quality.

Comparison of the results of bibliometric analysis of the Slovenian Journal of Public Health (SJPH) and the European Journal of Public Health (EJPH) for the period 2003-2011, has led as to the conclusion that the SJPH is not behind EJPH. This is also

confirmed by IF, which SJPH first received in 2011 ( $IF(2011)=0,452$ ). Therefore, Slovenian scientists could also publish the results of their research projects as scientific papers in local scientific journals. The difference in publication is that publishing in EJPH brings greater exposure and a greater number of received citations, which every author wants, yet scientists should have an interest in maintaining local scientific journals and informing the local professional public of their findings, and not just in scrambling for citations.

According to analyses, we can conclude that the impact of local journals in an international context is only possible if they are concurrently published in English. Therefore, greater international exposure can be assured for the authors' contributions, which increases the authors' interest in publishing in local journals. In the future, an initiative is expected of the Slovenian Research Agency, as a financier to numerous studies carried out by Slovenian scientists, to publish research in the form of articles, such as e.g. Open Access (OA). Examples in this area are the two largest financiers of research in the field of medicine: the American National Institute of Health and the British Wellcome Trust, which require from scientists that a version of their research is available in OA. This approach reliably contributes to promoting public access to publications and the faster flow of information and knowledge to other scientists in electronic form. Finally, it also affects the transparency of fund usage for the researches.

**Keywords:** Bibliometrics, Public health, Periodicals, International scientific journal, Local scientific journal

## **A bibliometric study of LIS literature related to academic law librarianship**

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**Abstract:** Academic law librarianship as a career has experienced an increase in expectations as law librarians have become more closely intertwined with the scholarly mission of today's law school. A bibliometric analysis of library and information science literature pertaining to academic law librarianship supports this idea as each year more academic law librarians are publishing articles covering a wide range of complex issues faced by all law libraries. The number of scholarly articles per year increased over the time frame of this study as well as the average number of authors per article. The results of this study identified three core journals that published most of the articles on this topic: *Law Library Journal*, *Legal Information Management*, and *Legal Reference Services Quarterly*.

## **Biographical research method to study the reading representations and practices: The case of high school students of the National University of Mexico**

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**Abstract:** The purpose of this paper is to present the advantages and difficulties of biographical research method which is based on semi-structured interviews in conversation mode used to reveal the affective factors to understand the perception of the readers and their emotions, memories, experiences, knowledge, and including personal fantasy in relation to reading. And also to know the possibility of some social aspects such as norms, values, beliefs and myths concerning reading books, Internet and libraries. The social representations are transmitted by the family, school, library and media. In this paper some findings about the electronic resources in the social representations and practices of reading among the students attending the first and third year of high schools of the National University of Mexico are presented, analysed and discussed. The biographical method could also offer the library professionals elements to design reading development programs, which could improve reading practices and strengthen the role of libraries in developing readers.

## **The blending of quantitative and qualitative library assessment data**

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**Abstract:** For years academic libraries have collected both quantitative data and qualitative data. More often than not these two types of data have been treated as separate, inviolable sets of information. The purpose of this program will be to demonstrate how quantitative and qualitative data can be blended together to better understand user needs and expectations as well as identify gaps in customer satisfaction when these needs and expectations are not being met. The process of merging these different types of data can also yield powerful arguments for improved services, resources and funding.

Between 2010 and 2012 the Texas A&M University Libraries participated – successfully participated – in 2 regional re-accreditation reviews, 3 programmatic reviews and 2 fee increase requests. At the same time, three of the Libraries' facilities underwent major renovations; our organization expanded, overseeing operations for four additional libraries; our monographic approval plan underwent a major change in both scope and funding; and, our entire organizational structure changed to consolidate and standardize the delivery of a consistently high level of customer service. What led and monitored the progress of these efforts was the continual review of both objective and subjective reviews of our customers' satisfaction and usage trends.

Quantitative data is based on precise measurements and therefore can be directly measured. Assessment generally identifies statistical relationships. Qualitative data on the other hand usually addresses descriptions – data generally comes from subjective determinations. Assessment yields patterns and themes.

Academic libraries have been invested in developing an organized method of collecting and analyzing quantitative data since as early as 1908 (Gerould Statistics). In 1962 the Association of Research Libraries (ARL) became responsible for collecting these statistics. In 1978 the Association of American Health Science Libraries (AAHSL) began a similar program – collecting quantitative data that was germane to health related

libraries. Other organizations have followed, either defining their own statistics or collaborating with existing programs to collect, report, and analyze library quantitative data.

While these quantitative efforts proceeded, libraries also sought to understand their users' characteristics and needs - most often with the aid of locally developed survey instruments. The purpose of these exercises was to gain insight into how their users perceived and rated the services, resources and facilities that the libraries provided.

In the mid-1980's Leonard Berry, A. Parasuraman and Valarie A. Zeithaml began research on ServQUAL. ServQUAL was developed to measure the scale of quality in the service sectors. Not only did they set out to develop better ways of measuring user qualitative insights but they advocated a new perspective – identifying and understanding user expectations. In 1999 ARL, using ServQUAL's framework, created a qualitative tool for libraries to use to measure user needs, expectations and satisfaction. This came to be known as LibQUAL+™.

In addition, libraries began to bring in experts from non-traditional library sources. Experts from the corporate, manufacturing and hospitality industries help craft other qualitative devices to measure resource gathering, service quality and climate data.

The traditional definition of qualitative data – that it could not be measured – was waning.

In recent years, accrediting agencies have moved away from inputs-based to outcomes-based measures. This led to efforts to combine qualitative and quantitative data to make cogent arguments to describe libraries, their constituencies and the organization's efforts to serve these customers.

Further, as the economy turned and competition for already limited funding increased, libraries began to combine quantitative with qualitative analytics to make their case. Funding requests were more easily made when the library users themselves became the advocates for the proposed improvements.

As a presentation or as a special session, this program will provide an inventory of qualitative and quantitative metrics that can be used singly and jointly to support accreditation efforts, funding requests and, most importantly, assessing our customers' needs and expectations. In addition, examples will be provided on the specific blending of these two types of metrics that can be used to identify user needs, expectation and trends. Examples of using qualitative and quantitative data to support funding concerns will be discussed.

As a workshop, this program will provide an inventory of qualitative and quantitative metrics. The workshop will then address how assessments of this data used singly and jointly in three different fashions:

1) To demonstrate how user trends, needs and expectations can be discovered in the four areas of

- a) Customer Service and Staff Expertise,
- b) Information Literacy/Life-long Learning Skills and Library Marketing
- c) Library Learning and Research Facilities
- d) Resource Collections and Resource Accessibility

2) To demonstrate compliance to and support of your academic institutions' missions

3) How quantitative and qualitative data can be assessed to determine and support funding needs

At the end of each section the workshop participants will be solicited for examples in which to apply the analyses discussed in the previous section.

## **Brazilian legal knowledge organization: a case of librarian historiography**

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**Abstract:** The legal knowledge in Brazil is studied from a clipping of three historical moments of one of the oldest Brazilian law libraries, with their respective context. The first stage involves the discussion of creation of legal courses, the foundation of the First Official Public Library of the Province of São Paulo and installation of São Paulo Academy in the 1820s. It represents the effort of building a national sovereignty in the intellectual and political frameworks and training of graduates for the administration of the country, a few years after the Declaration of Independence, against the Portuguese domination. The first inventory of the collection and preparation of the first printed catalogue are the first initiatives of organizing legal knowledge. It passes up for the second moment in the 1930s with the physical reconstruction of the Law School and the restructure of its Library under the influence of the most modern librarian techniques at that time. It is highlighted the cataloging, classification and indexing books and journal articles in bibliographic records. It belongs to a moment of creation Librarianship courses in the State of São Paulo, and construction of the modern Brazilian state. The last moment refers to the implementation of new technologies and services, and the internal initiatives of bibliographic control, between the late 1980s and 1990s, with emphasis on the implementation of alert services and availability of databases in Internet. Finally, it is approached the prospects and challenges of legal knowledge organization in Brazil in the first decades of the 21st century.

**Keywords:** Brazilian legal librarianship, Knowledge organization, Library historiography, University of São Paulo Law School Library

## **Bring up the exhibits: GIS and the Humanities at Cornell University Library**

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**Abstract:** The paper describes the efforts of the Cornell University Library and the Maps Unit in particular to reach out to audiences that are not usually identified as our “primary audience.” For decades there have been no geography departments in most of the top private universities in the United States, including Cornell. Thus, the University Library’s Map Collection is in the unique and somewhat awkward position of not having a “primary audience.” In its absence we try to provide support to a broader audience primarily in the humanities. The paper brings together the various outreach and teaching initiatives of the Map Collection and argues that the absence of a “home” department is

not an impediment to the research and learning potential of maps special collections and GIS technologies.

**Keywords:** Geographic Information Systems, Humanities, Map collections, Map exhibits, Outreach

## **Building a participative methodology for the facilitation of international information literacy courses**

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**Abstract:** This article summarizes the perspectives of both of its authors have taken in developing international information literacy (IL) courses and the evaluation their participants have made of the courses using questionnaires. Furthermore, it provides some insights toward the development of a common participative methodology to contribute to Library and Information Science (LIS) professionals who wish to develop such kind of courses.

The first case presented in this paper is an online course developed for a Latin American audience of LIS professionals. This course has been developed and facilitated two times at the moment of writing keeping in mind a Participatory Action Research perspective. This perspective allows participants to experience a type of constructivist scaffolding learning, where the facilitator introduces content progressively and encourages participants to build their own information literacy program (ILP), concentrating on: a) a working conceptual framework suited to each participant's institution; b) building its justification as a meta policy for information, promotion, communication and culture, concentrating on satisfying the needs of the institution and making it attractive for decision makers and managers; c) determine further training and resource acquisition needed before and during the development of the ILP; d) its pertinence with current IL declarations; e) building a strategic plan, its products, phases, and learning activities; f) providing participants with some notions of learning theories, instructional design and methods for evaluating the ILP. The progression through all these milestones during the course has resulted in that each participant ends up with a usable draft of a plan for an ILP tailored to their needs and institutions.

The second case presented in this paper is a single information literacy web-based package for independent learning developed in Estonia.

The contributions of this paper towards a participatory methodology are related to the need for truly useful and engaging IL courses, focused on providing the tools to the participants to develop a strategic plan for their ILP during such courses. Moreover, a common participatory methodology should aim to help library professionals overcome some of their weaknesses when trying to build an ILP, such as: providing them with conceptual and methodological tools, helping overcome a general lack of familiarity with learning theories and the little knowledge on how to structure each element of an ILP. Within this paper, insights from the participants' evaluations of these courses have been used to support assumptions and claims made on these matters.

## **Building an institutional repository at University of Malaya (Malaysia): UM Research Repository**

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**Abstract:** Now, more than ever, the way information is stored, retrieved and displayed is changing. The availability of printed materials can be retrieved in digitized format to support knowledge sharing among researchers and students. Indeed, many universities especially Research Universities in Malaysia are heading towards implementing digital content in their organizations. Digital repositories are also one of the initiatives taken by academic libraries in Research Universities to move towards digital library. Preserving records, mainly the research articles are a vital approach as a visibility of researchers and to be on par with the initiatives from other higher ranking universities in the world. The purpose of this paper is to provide summary of the experiences in setting up an institutional repository at University of Malaya Library, focusing some of the key issues that need to be considered, the teamwork involved, the choices made and the challenges overcome. This paper describes the initial project done by University of Malaya Library in preserving local research articles throughout the world in a way to promote open access which act as digital archive. University Malaya Research Repository is an open access digital archive containing details of published and unpublished research work produced by the University of Malaya staff and researchers. In supporting this project, University of Malaya Library chose E-Prints as a tool to embark this initiative in line with the status of an established Research University in Malaysia. This paper also describes the archiving process of the digital initiative in contributing towards the creation of digital records in open access platform. In conclusion, digital repositories such as E-Prints sustain the creation of visibility among researchers and students around the world. Access to the data is unlimited and this enables researchers to communicate and set up the networking among them for profession development.

**Keywords:** Digital repositories, Digital preservation, E-Prints, Institutional repositories, University of Malaya

## **Building civic capacity using a holistic approach to public library service: a participant researcher's perspective on social justice in the Cayman Islands**

**Public Library Service**

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**Abstract:** This paper discusses the implications and potential impact of the public library service on the social, political and economic conditions in the Cayman Islands. The Cayman Islands is currently facing a variety of quality of life issues including unemployment, declining industries and a dynamic government landscape. Underpinning these issues is the need for Caymanians to participate, from an informed perspective, in the decisions directly impacting quality of life. To this end, Caymanians will need to be



information literate, civically engaged and aware of the global market and, cognizant of and participatory in the preservation of their individual cultural heritage in order to ensure on-going economic viability for the country. An analysis of the information access practices in the Cayman Islands show how the restructuring of the public library service along four strategic directions supports an expanded the civic capacity for Caymanians.

**Keywords:** Social justice, Public library roles, Civic engagement, User-centred services, Community information centre, Service transformation, Cayman Islands

## **Building successful Information Literacy infrastructure in promoting student engagement in learning: a grounded theory information analysis model**

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**Abstract:** Qualitative analysis was used to prepare a full picture of the teaching strategies and library research experiences of 118 English 10 students, 10 English 10 teachers, and 3 UP main library reference librarians over a six-month period for the 2<sup>nd</sup> Semester, AY 2010-2011 in the University of the Philippines, Diliman. The participants were interviewed concerning their demographic conditions such as students' year level, gender, and academic major, teachers' and reference librarians' educational attainment, years of English 10 teaching experience, years of teaching library research in the university, rank designation, normal educational attainment, and the areas in which they described their teaching strategies and library research experiences. The researcher took the role of observer/interviewer for the sessions. Interviews and talk during English 10 sessions with the teachers, students, and reference librarians were transcribed, coded and contextualized, adding to the understanding of the design of a library research instruction module for English 10. Using a Grounded theory methodology created by Strauss and Corbin (1998), transcripts of the interviews were divided by linguistic idea units and coded according to categories and subcategories, processes, influencing conditions, strategies, and outcomes related to library research instruction, which contributed to the articulation of the theories and the modules.

The grounded theories exist in three areas: (1) English 10 teachers group; (2) UP main library reference librarian group; and (3) English 10 students group. Additionally, a coding scheme was created out of the ACRL Information Literacy Competency Standards for Higher Education precepts and from the responses of this study that focused on the performance indicators which helped objectify the nature of the module's model of instruction. Findings revealed that although reference librarians were providing library instruction sessions that some English 10 faculty members and English 10 students found to be beneficial, walk-ins and one-to-one assistance, activities that incorporated both technical and pedagogical strategies were still necessary. This study provides information that can be used to assist academic librarians when preparing to teach library research instruction and to assist academic libraries in redesigning and developing library research instruction activities for preparing librarians to teach undergraduates. The Library Research Instruction Program for English 10 (LRIE) that serves as the core of the work provide an instructional module that can be used by librarians for diversifying their instructional delivery with engaging learning tasks.

**Keywords:** Pedagogy, Curriculum design, Collaboration, Information Literacy, Grounded theory, Information behaviour analysis

## **A case study of migration to an Open Source ILS: partnership among state libraries**

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**Abstract:** This case study will describe the experiences of librarians in a small consortium and their collaboration with the state library during the process of migration to an open source integrated library system (ILS). Social justice is conceptualized in terms of policies, such as the “redistribution of goods and resources to improve the situation of the disadvantaged” (Bankston, 2010). With this understanding of social justice—issues of resources, power balance and negotiations—will be discussed using case study as a methodology. The objective of this case study is to understand the roles played by different stakeholders and the power dynamics of such a collaboration through the lens of social justice.

**Keywords:** Case study methodology, Social justice, Open Source Software, Integrated Library Systems

## **Challenges of providing information services in an academic library: the need for decentralization**

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**Abstract:** The paper takes a cursory look at the development of some departmental libraries springing up in many faculties, departments and units of the ObafemiAwolowoUniversity, Ile-IfeNigeria which were not under the control of the main library. The main aim was to determine whether students prefer to use departmental libraries rather than the main library. Questionnaire was distributed to elucidate information on the necessity of departmental libraries. Results showed that there was the need for university libraries in Nigeria and academic librarians to promote library and information services in their domain in order to cope with the challenges posed by growth and expansion in the various institutions. 56.25% have preference for departmental libraries as opposed to 43.75% in favour of centralized libraries. The paper concludes that decentralized library systems should be introduced urgently as indicated by undergraduates in order to overcome the spatial problems created by increased student population over the years.

**Keywords:** Academic libraries, Decentralization, Departmental libraries, Faculty libraries, Information needs, Services

# Challenges to the research of public library impact on rural island community

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**Abstract:** Study of the public library impact on the community is one of the most important issues in the area of library evaluation. Recent studies (Kerslake, E. and Kinnel, M. (1998), Markless, S. and Streatfield (2006), D. Matarasso, F. (1998) underline the importance of such studies and the development of the adequate methodology. Without doubt, public libraries are of high importance in the rural and specific communities. However, methodologies used are specific of larger communities, and in particular of larger inland communities. This paper presents the results of a study undertaken in 2012 in two Croatian island communities. Since there were no systematic studies of library impact in Croatia so far authors had to adapt methodology used in similar foreign studies. Research methodology was based on the model used by Rebecca Linley and Bob Usherwood (1998) Furtheron, the choice of the method was based on the suggestion of Croatian sociologist Anči Leburic (2001) who points out that island communities are best researched using triangulation, integration of qualitative and quantitative methodology. Methodological approach developed for this study confirmed that triangulation is the most appropriate approach, while the basic methodology must be qualitative.

In this paper, special attention is given to the analysis of the methodological apparatus used in the described study and the analysis of the most important results. In this particular study, case study was chosen as a research strategy, and document analysis, interviews, focus groups and questionnaire were used as research tools. Results of the study confirmed the starting hypotheses and gave answers to the following research questions: what is the role of the library in rural island community; is there a relation between specific characteristics of rural community and library management and service delivery on island; how do libraries participate in the cultural life of the community; can data collection methods used so far help decision makers on local and national level in the determination of the public library role in the community and funding policies; what are the most appropriate methods and models for the evaluation of library impact on the community.

**Keywords:** Rural island communities, Library role, Sociology of rural communities, Evaluation of library impact, Evaluation methodology

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## **Change management in transition to e-learning system**

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**Abstract:** Though e-learning technologies are begin to be used in education institutions but their role entirely depends on the acceptance and execution of required-change in the thinking and behavior of the developers and users of institutions. It is very hard to change the behaviours, cultural bonds and lifestyle of the users in the educational institutions. Teachers, students and administrators are used to traditional pedagogy and educational administration and research is constantly reporting that many e-learning projects are falling short of their objectives due to many reasons but on the top is the user resistance to change according to the digital requirements of new era. It is argued that the suitable way for change management in e-learning environment is the training and persuading of users with a view to enhancing their digital literacy and thus gradually changing the users attitude in positive direction. This paper discusses change management in transition to e-learning system considering pedagogical, cost and technical implications. It also discusses challenges for integrating these technologies in higher learning institutions with examples from Turkey GATA (Gülhane Askeri Tıp Akademisi- Gülhane Military Medical Academy), and giving best practice approaches for addressing each of the challenges.

**Keywords:** E-learning, Change-management, User-resistance, E-learning technologies

## **Change of libraries and library services**

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**Abstract:** Daily life changes of today's societies; need for new information; behaviours for seeking it and its technologies; and the rapid progress in this area have forced the already existing information centers and the concept of knowing the information to change. To make possible for the individuals to reach the information they need at the right time, at the right place and in the right form is the main purpose of the information centers. However along with the progressing and changing resources, information centers should leave their places to the very new services, technologies and discoveries. The shift of information sources from hard copy versions to soft copy ones, revealed the necessity of follow the technological changes in this area closely. It is inevitable for an information center to be inadequate to manage the information unless it is updated by new technologies. In accordance with these developments; changes in the area of information sciences should bring a new understanding in the relevant service areas. Information professionals should be able to manage the needs and expectations of users in the right way and should design effective services. In the work; the changes of information centers, its users and information professionals will be discussed; several predictions will be made about future libraries; users' necessities and expectations will be planned and services that are relevant to all these concepts will be designed.

**Keywords:** Future libraries, Change of library services, Information search trends

# **The changing electronic information needs and seeking behavior of post-graduate students and research scholars of Mizoram University, India**

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**Abstract:** The paper aims to explore the habit of use of information in an electronic era by the Post-Graduate students and Research Scholars of Mizoram University, Mizoram (India). With the emerging needs and increased fascination for use of electronic resources, the information centres and libraries are expected to acclimatize with the inherent pressing needs of changed mindset of users. Information is the key element for any kind of academic and research work. With the introduction of computers and other telecommunication facilities, information is now available to the students and researchers in a variety of formats. Information seeking behavior in electronic environment need to be understood to render qualitative services to user community. The online access services, offline digital sources and Internet services are the most popular library services in upcoming electronic culture. The paper aims to determine the exposure of the Post-Graduate Students and researchers of

Mizoram University to different sources of information like course books, reference books, e-books, e-journals, theses and dissertations, etc. Relevant literature on the electronic information seeking had been reviewed. The paper also deals with the various aspects of information seeking by the students and researchers such as sources of information used the frequency of using information sources to locate reading material and the problems faced by the users while searching for information. A structured questionnaire was distributed to the Post-Graduate Students and Research Scholars to collect the necessary primary data keeping in view the objectives of the study. Data were collected from 200 Post-Graduate students and Research Scholars of different departments. The results of the investigation provide useful information about the changing information needs and the information seeking behavior of the Post- Graduate Students and Research Scholars in an electronic environment.

**Keywords:** E-resources, Mizoram University Central Library, UGC-Infonet Digital Library Consortium

# **Changing the service delivery landscape in academic libraries in Ghana**

*Evelyn Ekua Mensah and Richard Bruce Lamptey*

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**Abstract:** Academic libraries are fundamental in supporting teaching, learning and knowledge dissemination. In this era of electronic evolution, academic libraries are shifting the service delivery landscape as such, training sessions are organised for members of the academic community for maximum utilisation of the library resources. This paper seeks to investigate how the users are trained to use and access the library's resources and services. Appropriate recommendations would be made and solutions to identified the challenges and plans to improve the services to ensure full utilisation of the services.

## **Citation analysis in the field of technologically enhanced learning**

*Christina Anastasopoulou*

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**Abstract:** The purpose of this study is to provide a bibliometric analysis of articles in the field of technologically enhanced learning that were published in twenty Social Science Citation Index (SSCI) journals from 2000 to 2010 to determine the concepts that are emerging and the ones that are diminishing. The 11,021 original papers that are gathered are further classified in research areas based on concept clusters. Then they are analyzed to determine the contribution in the field over the years. Different research areas that are evolving or diminishing, most discussed research areas, most cited researchers, leading institutions and countries.

**Keywords:** Technologically enhanced learning, E-learning, Bibliometrics, Citation analysis

## **Citation analysis of some Hungarian medical journals compared with Italian and international Open Access medical journals between 2007-2011- Based on Web of Science, SciVerse Scopus databases and different bibliometrics indicators and tools**

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**Abstract:** The publishers of the scientific journals seem to have more and more difficulties nowadays: force of publishing, impact factor, open access or financial problems. This struggle occurs exponentially at the national journals, where the articles are published on non-English languages. How they can compete with international journals – especially with those, which have impact factors. Our library tradition is to support the national medical editors with citation and content analyzes.

The aim of this study is to analyze the citation features of Hungarian medical journals from 2007 until 2011; how to cite these journals, where they can stand on the citation ranking list of the international medical periodicals. The Hungarian medical journals are compared with Italian medical journals and open access journals as well in this comparative study.

The citation characteristics are analyzing based on well-known citation databases like Web of Science, Sciverse Scopus and sources of other bibliometrics indicators like Journal Citation Reports, Scimago, Altmetrics...etc.

With this study we would like to give a comprehensive picture of Hungarian medical journals for the future development.

**Keywords:** Citation analysis, Bibliometrics indicators, Medical journals, Citation ranking

## **Citation errors among male and female students in education doctoral dissertations, 2008-2012: the case of the University of Kansas**

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**Abstract:** This study investigates the proportion of incorrect reference citing among male and female students in an educational doctoral program at the University of Kansas (KU) during the 2008 thru 2012 cycles. The data was collected from the Dissertations and Theses @ KU databases. Statistical analysis was performed using one-way ANOVA, chi-square and t-tests to evaluate the correlation of citation errors and gender. The results indicate that there is no statistical difference in making citation errors between male and female graduate students in their doctoral dissertations.

**Keywords:** Bibliometrics study, Citation analysis, Quantitative research, Statistical significance analysis, Doctoral dissertations in education, University of Kansas

## **Cloud computing for academic libraries**

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**Abstract:** Information and communication technologies (ICT) have become commonplace entities in all aspects of life. Across the past twenty years the use of ICT has fundamentally changed the practices and procedures of nearly all forms of endeavour within business and governance. Within education, ICT has begun to have a presence but the value of ICT is not affordable. The basic principle of cloud computing entails the reduction of in-house data centres and the delegation of a portion or all of the Information Technology infrastructure capability to a third party. Universities and Colleges are the core of innovation through their advanced research and development. Subsequently, Higher Institutions may benefit greatly by harnessing the power of cloud computing, including cost cutting as well as all the above types of cloud services. In this paper we discuss problems faced with digital library and development efforts to overcome that problem. Then it proposed to improve current user service model with Cloud Computing. This paper explores the application of cloud computing in academic Libraries.

**Keywords:** ICT (Information and Communication Technology), Cloud computing, User services

## **Cloud computing for greener Chhattisgarh**

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**Abstract:** Cloud computing is one of the new buzzwords in the business world. This article galore on everything from what it is to how secure it is, from what to ask a potential cloud vendor to the risk and benefits of cloud storage. But, a new question that's arising about this new technology is how green it is. Can it help a library reduce its energy consumption? Does it really reduce the need for hardware, thus reducing the need for additional consumption and the creation of waste? The cloud computing market, initially structured to cater to the information technology sector, is now finding optimum use in other industries (retail, healthcare, supply chain, etc.) as well. A report predicts the cloud computing market to reach \$210 billion by 2015. The advantages of business agility, scalability, and reduced costs have prompted businesses to vie for a spot in the clouds. It is evident that cloud computing offers some serious benefits for libraries all over the world but not many people know the role cloud computing plays in controlling greenhouse gas emission and sustainability. Cloud computing enjoys the tag of being one technology that is not only beneficial for libraries but also for the environment (Pike Research; 2011). According to a study, the information technology industry consumes 2% of the global energy. With technology spearheading every business domain, it's tough to predict how much energy IT systems actually consume and what impact it has on the environment (Gartner; 2010). According to research, the use of cloud computing technology could reduce worldwide data center usage by 38% by 2020. Because cloud computing technology enables organizations to operate without installing a host of hardware systems, it allows the organizations to reduce their carbon footprint considerably. The fact is that cloud computing technology not only reduces carbon emission levels, it saves organizations considerable amounts of money in energy savings(Pike Research; 2011). A report published highlights how the use of cloud computing technology could result in carbon emission savings of 85.7 million metric tons/year by 2020. As for the organizations, it could enable companies to save \$12.3 billion in energy bills (Verdantix; 2011). Simply put, cloud computing technology is not only much more efficient than traditional data centers but also much more beneficial when it comes to energy savings. This paper defines the importance of cloud computing in reducing the paper and energy consumption of a library and how cloud computing can be used to achieve our goal towards building cleaner and greener Libraries.

**Keywords:** Cloud computing, Library automation, Green libraries, Chhattisgarh

## Clouds security

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**Abstract:** Cloud computing is the most buzzing word in the IT Industry today. While some consider it as a future derived technology that will not only help organizations to gain more profit but will also have a positive impact on the environment, others consider it as a past derived technology which is a refined version of Timesharing model from late 1960's and nothing new. Whatever the words be, Cloud computing has gained a lot of attention in the recent years and has a wide scope in the IT industry and the big IT giants are all set to provide cloud services to the clients, as they require. Beside its wide possibilities one threat that cloud faces is of its security issues. As in cloud computing the data resides in the third party data centers, the data is always vulnerable to attacks and



changes. The changes or modification of data can be in from of a third party attack where an unauthorized person makes unwanted modification in the data or it can be an insider attack where an authorized person makes unauthorized changes in data. In this paper we have identified some areas where cryptography can help a rapid adoption of cloud computing. Although secure storage has already captured the attention of many cloud providers, offering a higher level of protection for their customer's data, we think that more advanced techniques such as searchable encryption will become popular in the near future, opening the doors of the Cloud to customers with higher security requirements.

**Keywords:** Cloud computing, Searchable encryption, Secure storage

## **A coded analysis of student feedback and implications for bibliographic instruction programs**

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**Abstract:**In an attempt to understand students' perceptions of library instruction sessions, the authors sampled from over 25,000 post-instruction questionnaires to identify common themes, patterns and issues across a range of demographics. Free-text comments were collected from undergraduate and graduate students between 2005 and 2010 and transferred to ATLAS.ti for data analysis. An earlier study identified overall themes across all student groups; this study focuses on specific themes that emerged according to student class, college affiliation, and repeat versus first-time attendees. The authors also examined comments that referenced personal and emotional statements. With a better understanding of user perceptions and information needs at more discrete levels, library instructors can provide more effective and targeted bibliographic instruction sessions.

**Keywords:** Library instruction, Assessment, Student feedback, Questionnaires, ATLAS.ti, Qualitative research, Academic libraries, Students, Customer service

## **Collaborations at the level of Romanian academic libraries**

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**Abstract:**During the last two decades specialists underlined many times the need for a co-operation policy at the level of Romanian academic libraries. At the same time, the lack of co-operation and the inability of reaching a common direction have been pointed out and criticized. Despite the fact that Romanian libraries and librarians are not the best example in this area examples of collaborations between these libraries can be found during the past years. In order to investigate the different reasons for this lack of co-operation we decided to conduct a research at the level of academic libraries in this country. Part of this research consists in an analysis of the way in which collaborations in

the space of Romanian academic libraries are reflected in some of the main LIS (Library and Information Science) Romanian journals. Another important part consists of a questionnaire survey at the level of academic libraries' directors. The paper presents some preliminary results of this research and comes with examples from one branch of a large academic library in Romania which refer only to collaborations with the academic staff, students, and the faculty, and which involve different kinds of resources available in the library.

**Keywords:** Academic libraries, Collaborations, Librarians, Co-operation, Romania

## **Comparing library use by academic area: replicating Hiller in a Brazilian context**

***Gabriel C. Leal de Araújo<sup>1</sup>, Frederico A. de Carvalho<sup>2</sup> and Marcelino J. Jorge<sup>1</sup>***

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**Abstract:** Originating from previous work by Hiller (2002) and Chrzastowski & Joseph (2006), the paper investigates whether selected aspects of library use in a system of university libraries differ by academic area during the period 2000-2007.

According to several preceding authors, there is a long-standing perception that academic areas and disciplines - for example, the sciences and the humanities - use library materials differently, reflecting differences in research material use and in preference for distinct information sources. For those authors it might be expected that humanities disciplines would report more reliance on print-based materials and therefore higher in-library use, while science disciplines would report a higher use of online resources and remote library use.

Even though such differences have been expected and proved as different, recent data would likely show some blurring of these trends to the extent that more and more research material in every discipline becomes available online and Internet use becomes a more widely-used part of every discipline's research culture. The widespread use of Internet (re)search engines may be influencing recent generations of library users. In addition, new C&I technologies have changed the library as a new space for social and academic interactions and conviviality (Hiller, 2002; Ammot, 2004).

The paper differs from previous work in that it collects empirical evidence from secondary data existing in the university's MIS rather than from user surveys. Sampled libraries correspond to some 85% of the whole system and are administratively allocated to academic areas classified as Sciences, Humanities and Health. Library use is represented by several attributes, such as visits, registrations, consultations and loans, but some other variables relating to library resources – for example, volumes and physical space – have also been considered. Annual differences among areas have been verified by the nonparametric test of Kruskal-Wallis.

Findings suggest that, in what variables representing library use are concerned, significant differences among academic areas occurred for only a few cases during the period. However, differences among library resources – that to some extent represent differences in the supply side of user behaviour – do occur much more frequently. In any cases confirmed differences distinguish the humanities from the other two (“harder”) areas.

**Keywords:** Academic libraries, Library use, Differences in library use, Kruskal-Wallis test

## Comparison of Iranian National Medical Library's (INLM) services with selected digital libraries

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### **Abstract:**

**Introduction:** The important role of ICT and its affect on information storage and retrieval in digital libraries changed the traditional library activities and services. It seems despite of these changes, different digital libraries don't offer the same services to their users and only some of them have enough effectiveness. The object of this survey is evaluation of INLM through comparison of its services with other digital library in the world.

**Methods:** This study was an applied-descriptive survey. The statistical population was 33 digital libraries of selected countries, which were retrieved by searching "Digital Library" in Google between November to December in 2012. Data were collected by direct referral to those digital libraries' websites and were arranged in Microsoft Excel software.

**Results:** The Services that offered in digital libraries were categorized in 3 parts: digital services, public services and traditional services. Results showed that most of the 33 selected digital libraries offer services like "Browse" (87/87%), "Search" (84/84%) and "Electronic information retrieval" (57/57%) in their digital services part. In public services part, service "Help" (48/48%) and in traditional services part, service "Interlibrary Loan" (27/27%) had the maximum frequency. Iranian National Medical Library (INLM) in comparison of other digital libraries offers more services in digital services part, but offers less services in public services and traditional services part.

**Conclusion:** As a whole, the studied digital libraries emphasis on the same services in different parts. In comparison of other digital libraries, INLM was relatively successful. It seems that some differences in offering services depend on environment, specific conditions and user information needs.

**Keywords:** Services, Iranian National Medical Library (INLM), Digital libraries

## Comparative analysis in the ethical use of Information and Librarianship Education in Mexico: an investigation process

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**Abstract:** The aim of this investigation study is to perform a comparative analysis of study programs and plans taught in higher education schools in Mexico related with Librarianship, and Information Sciences, regarding how students use the information, as well as to analyze how professors are involved in the ethical formation for the use of information.

Authors like Luciano Floridi and Rafael Capurro, among others, have studied in depth the importance of Information Ethics in regard to its nature, scope, and purpose. However, the importance of analyzing the ethical use of information by the users, and moreover, in the professional education and training related with information has been set aside. Thus, a need to perform comparative investigations in the training schools of the future professionals of information in Mexico emerges for understanding the situation of the ethical use of information.

Future professionals of information should have the tools to educate users in its ethical use, so it becomes necessary to investigate if they are being trained precisely for such, allowing them to train users in the ethical use of information at the same time. The latter is the reason why this article will discuss the following subjects:

1. Comparative analysis: its methodology.
2. Comparative analysis as a mean to consider about the training and education on the ethical use of information in higher education institutions in Mexico.
3. How comparative analysis allows to visualize a transverse perception of Ethics in Mexican higher education institutions.

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# **Competencies for library and information science professionals in electronic publishing and digital archive industries**

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**Abstract:** It is observed that there is a shift of work force of LIS graduates from public sector to private sector, named Electronic Publishing and Digital Archive Industries in Taiwan. The aim of this study is to reveal the driving force of the students moving towards Electronic Publishing and Digital Archive Industries, the positions held by LIS graduates, work responsibilities and the competency required.

The authors took case study approach in this study. In-depth interview and document analysis were employed as research methods. The authors interviewed LIS graduates work in a target company, the supervisors and the service accounts were also interviewed to gather information about the positions held, main responsibilities, major tasks carried out, professional competency needed and job performance. The documents including job description, hiring ads, work reports were collected for gaining supportive evidence. The ground theory method and knowledge-skill-attitude model were used as framework for data analysis.

The results show that LIS graduates hold positions as sales, marketing planners and information management officers in the target company. The major tasks include product promotion, marketing, and system management based on the positions held. LIS graduates are aiming to gain more experience and challenges by choosing devote to Electronic Publishing and Digital Archive Industries. LIS professional training provides a knowledge-skill-attitude ground for LIS to get job offers in the industries since “contents”, “acquiring and organizing contents”, “use of contents” and “contents use behavior” are essential issues covered by LIS education. Knowledge on industrial culture, marketing skills, and negotiation experience are the main competency lack in the prior education and training. LIS graduates have to learn and enhance the knowledge-skill-attitude on the job. Self-confidence, responsibility and diligence are the characteristics that the supervisors and service accounts see in LIS graduates equipped with advantages to be members of electronic publishing and digital archive industries. Be aggressive, innovative and flexible are the qualities that the LIS graduates need to cultivate to evolve in this profession. Besides the findings, the suggestions for LIS graduates want to work in the industries and LIS curriculum program planning were also discussed in the work.

**Keywords:** Library and Information Science Graduates, Professional competency, Electronic publishing industry, Digital archive industry

## **A conceptual framework for the inclusion of socially-constructed metadata in library resource description**

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**Abstract:** Taking into account the present challenges libraries face to incorporate user-generated metadata in their metadata functions, a conceptual metadata framework which aims at the inclusion of socially-constructed metadata in library resource description is suggested. Concepts and principles that underpin socially-constructed metadata have been identified and analysed using a constructivist grounded theory method (Charmaz, 2006). In-depth interviews conducted with purposefully selected participants of Library and Information Science researchers, practising librarians, metadata consultants and library users were analysed using three stages of analysis: open coding, selective coding and theoretical coding. From the analysis, four overarching metadata principles emerged. The results of this research show that metadata should not simply consist of the physical description of the medium but should also incorporate descriptions about the semantic content and aboutness of information objects. To achieve this, it is indicated, users should be involved in adding metadata through tags, comments, reviews, ratings, and recommendations. Besides, the implications of incorporating user-generated metadata for users will be highlighted.

**Keywords:** Metadata, Cataloguing, Digital libraries, Web 2.0, Semantic Web, OPAC, Socially-constructed metadata, Standards-based metadata

## **Congruency between information professionals' readiness attributes and the digital information environment**

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**Abstract:** The study investigates the extent to which information professionals' readiness attributes are congruent with the digital information environment. The Facebook was used to form a focus group of twenty information professionals from different academic libraries and resource learning centers in Oman. Data collected through the focus group were analyzed using thematic categories. The study shows that information professionals were willing to play an active role in the digital information environment if their organizations offered them opportunities to gain more training and rehabilitation to upgrade their readiness attributes. Moreover, information professionals need to be involved in organizational strategies and policies to update their readiness attributes and to match their thinking and actions with the overall organizational goals and strategies. They should be motivated through all available incentives and career opportunities to inspire them to act and achieve.

## **Considering qualitative and quantitative data gathered using a cross-institution Information Literacy assessment tool**

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**Abstract:** A collaborative pilot project was launched between four academic libraries in Canada who desired a more reliable, efficient and cost-effective process for the assessment of student learning as it relates to information literacy (IL). The goal of the project was to create and jointly implement a customized IL instruction assessment tool that responds to the unique needs of local institutions and provides a strategic and relevant model for assessing IL skills among undergraduate students.

**Keywords:** Information Literacy, Assessment, Post-tests, Quantitative data, Qualitative data, Collaboration, ILAAP, Alberta, Canada

## **Conspectus is it a tool or a goal in collection development dilemma?**

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**Abstract:** University libraries had a great momentum to adopt quantitative and qualitative measures in order to examine the content and characteristics of their collection as a validated way to determine the size, age, scope and depth of the collection whether as a self assessment or in comparison to peer -universities libraries regionally and globally. Thus, This Paper aims to highlights the potential value of using “Conspectus” as a proper measurable way to be used in collection analysis and development in university libraries. It presents the philosophy and processes of implementing conspectus whether to articulate the strength and weakness of the library collection or build a core collection list of titles that fulfils the needs of university library patrons. A real case study of implementing “Conspectus” will be presented and ready- to-apply recommendations will be discussed.

**Keywords:** Conspectus, Collection development, Academic libraries

## **Content analysis method in scientific literature produced in the areas of Librarianship and Information Sciences in Mexico**

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**Abstract:** In the beginning, content analysis was considered as a descriptive and quantitative technique, but according to the cultural, scientific, and technological

progresses of society, its use has evolved until considering it a method that combines quantitative and qualitative aspects in its application. Currently, besides having important technological contributions for its application, several authors consider inference as the last instrument to be employed, which situates content analysis as an important method of qualitative investigation.

This article studies the cases, manner of application, and results obtained from utilizing the content analysis method in the postgraduate theses carried out in the area of Librarianship and Information Sciences in Mexico, from the year 2000 to date, with the aim to identify and divulge its practical application in a specific context, such as Mexico.

**Keywords:** Content analysis, Qualitative content analysis, Investigation methods, Qualitative methodology of investigation

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## **Control cancer terminology**

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National Cancer Institute Jose Alencar Gomes da Silva, Brazil

#### **Abstract:**

##### **BACKGROUND**

This project is part of the public policy for cancer prevention and control of the National Cancer Institute in Brazil. The project focuses on the need of identifying and unifying the terminology used in the Institution.

##### **OBJECTIVE**

To expand the access to health care information by developing an updated terminology and promoting the intensive use of available sources in scientific and technical Cancer Control approaches.

##### **METHODS**

The methodology involves consultation with a diverse group of subject matter experts that will work together and support the development and the certification of a terminology in many areas of specialization. It is considered crucial the formation of a team composed of representatives from diverse areas to work on the project. This methodology involves consultation with a diverse group of subject matter experts that will work together and support the development and the certification of a terminology in many areas of specialization.

##### **RESULTS**

This project anticipates to upgrade, expand and disseminate the terminology for cancer management and control, used in cancer research and treatment.

##### **CONCLUSION**



The main results expected from implementation of the project are: Cancer control terminology update; Dissemination of the updated terminology on cancer control; Allow free access to cancer control information available; Create methodology and mechanisms for constant updating of cancer control terminology.

## **Coordination, traceability and evaluation challenges to improve the French healthcare system: the role of interfaces organizations**

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University of Paris East Marnela Vallée, France

### **Abstract:**

#### **1-Informational and Communicational Challenges in the French Healthcare Sector**

In the first part of this paper, we will show how the issues of information and communication become important in the Healthcare sector in all developed countries (France, UK, USA...).

The challenge is especially important in France where the boundaries (walls or compartmentalization) are very strong in the Healthcare sector: between primary care and the sector of hospitalization, between the professions (doctors, nurses, nursing assistants...), between the administrative and medical professions, between the Ministry (Department) of Health and Health Insurance.

After referring to the specificity of Healthcare data (subject to special and restrictive legislations in all developed countries), we will show that these issues of information and communication correspond to 3 different levels of Management of Information:

- Micro: the question of traceability of actions and monitoring the patients pathways care with the specificity of the Electronic Health Records.

-Meso: data for the daily operation management in Healthcare organizations.

-Macro: for controlling the entire Health System and for the evaluation of organizations by the Ministry of Health and Health Insurance with the new role of Health Regional Agencies (ARS) and other organizations such as ASIP (Agency for Shared Information Systems in Health), or HAS (High Authority in Health).

#### **2-Their importance particularly in Interface Organizations: Coordination, Traceability and Evaluation**

We will discuss issues of information and communication by studying the case of new Interface Organizations that have developed in recent years in France to promote cooperation between primary care and public hospital sector (hospitals) or private clinic such as Hospitalization at Home (HAD), Healthcare Networks, Pluriprofessions Nursing Homes or MAIA (Centers for Alzheimer Patients) extended to Houses for Managing Dependence ...

We will outline the importance of Information and Communication Systems and of Documentation activities in relations with all the partners and particularly funders (funding requests, responses to surveys, activity reports ...). These activities of information and communication contribute to shape the organizations analyzed.

We will show how the development of these new Interface Organizations is strongly based on the use of ICT (Information and Communication Technology): shared medical records, information systems, services platforms and call centers.

#### **3-New skills and offices with the importance of ICT**

These new uses of information correspond to activities or new professions of "translators", mediating people, that we will present: the organization documentary interface, nurses cases managers, hospital mediating agents, responsible for data hosting.

We place a particular emphasis on the specificity of the new office of coordinator of these new interface organizations projects, at the same time facilitator, giving sense, arbitrator, conflicts manager ...

We will show how all these developments, which rely heavily on new uses of information, help to build a new Healthcare System with tensions, particularly between “managerial ideology” (culture of efficiency and results) and the own logic of the various professions and of the patients.

So these New Interfaces Organizations are experimental areas to try to cope with the three main challenges of the French Healthcare System: Coordination, Traceability and Evaluation both to master costs and improve quality of services provided. They are particularly important to give meaning to the project of “Health Democracy” betting on patients commitment (empowerment) to develop collective intelligence in a context of proximity.

**Keywords:** Coordination, Traceability, Information management, Interfaces organizations, Healthcare, Networks, Skills, France

## **Correlation and regression between proprietary and open access scientometrics tools-an exploratory study**

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**Abstract:** Although many authors believe that their work has a greater research impact if it is freely available, the dedicated studies which demonstrate this are only a few among the literature. This article is an exploratory study about correlation and regression between Web of Science, Scopus and Google Scholar articles impact and visibility. We started with research evaluation tools, like Scival. We identified top authors of Transilvania university of Brasov and principal research competencies. We obtained data strings regarding the activity of these 85 top professors, number of citations, data strings related to the number of indexed articles and Hirsch index calculated in Scopus. Similarly we get data for the same professors using the scientometric database Web of Science. We get sets of data for the same professors using the software Publish or Perish, which is indexing Google Scholar. We statistically analyse the three data sets using Data Analysis statistics ANOVA and histograms. A strong correlation between the existing open access articles indexed in Google Scholar and the number of articles in Web of Science database is demonstrated. We determine the coefficients of regression equation, considering linear regression. We demonstrate what the dedicated literature just anticipates: open access increases the research impact and the number of indexed articles in the other scientometric databases also increases.

## **The correlation of using information technology with efficiency of service training courses for librarians in Islamic Azad University of Yazd**

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**Abstract:** The aim of study was finding the correlation of using educational technology implementation as information technology with the efficiency of service training courses for librarians at Islamic Azad University in Yazd, a province in Iran.

**Methodology:** The research method was survey descriptive, of applied nature. In addition, to collecting data, it was a research of quasi-experimental nature, with two groups of test, and control, as well as an examination.

The statistical population consisted of 593 librarians working in Islamic Azad University in Yazd province. The sample of the statistical population was selected as 40 persons, through Cochran formula and random class approach.

Data collection tool was a questionnaire with 23 questions in Likert scale (as post-test).

**Findings:** The findings indicated that the average efficiency of the course in which information technology had been used was 3.9 and that of the course in which information technology had not been used was 2.6. Moreover, the T test in the efficiency of the course with information technology was equal to 4.189 and the degree of freedom was equal to 38, with a significance level of 0.000.

**Conclusion:** Since the significance level was less than 0.05, it was concluded that there was a correlation between the use of information technology-- during a service training course--and the efficiency of the course. Thus, it was deducted that the service training course with information technology was more efficient.

**Keywords:** Information technology, Librarians' service training, Efficiency, Yazd

## **Cost analysis of e-journals, based on the scientific communities usage of Science Direct Online Database with special reference to BanarasHinduUniversityLibrary, India**

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**Abstract:** This paper presents preliminary findings of cost analysis of Science Direct Online Database electronic journals used by the science community users of Banaras Hindu University Library. This paper discusses emerging use and cost trends among electronic titles, and demonstrates a cost model that provides some insight to relative costs of per article of electronic journals. Results of the study suggest that Science Direct e-journals do affect use and cost of per article download to a significant degree.

**Keywords:** Cost analysis, Cost per article, Cost per download, Cost of e-journals, Elsevier Science Direct, Banaras Hindu University Library

## **Cost benefit analysis of acquisition of books in central university libraries of Delhi: a comparative study**

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**Abstract:** Cost-benefit (CB) analysis, an experiential methodology used by economists to estimate the cost benefit of the documents and comparing them to the operating costs of the library. The need and importance for cost-benefit analysis in libraries is enormously, but it has difficulties in applying the technique in libraries. Although many cost minimising efforts have been made by libraries, value measures were found to be intangible and inappropriate, and so a serious threat to the integrity of the cost-benefit analysis. This paper expresses the concept of cost-benefit analysis in libraries. A systematic three regular years sample of documents acquired by University Library (UL),

University of Delhi (DU) and University Library (UL), Jawaharlal Nehru University (JNU) Libraries were subjected to a simplified cost-benefit analysis. Cost per use of a document appears to be useful relative amount for assessing documents acquired to by a library. Two sets of questionnaire were designed and administered to both university librarians and users of the library. A total of 967 and 990 questionnaires were administered to the user community of under studied libraries of DelhiUniversity and JawaharlalNehruUniversity respectively. The study provides an additional dimension over and above what appears in a simple use study to an understanding of document usage. The conclusion is drawn that many non-economic factors dominate the decision to acquire to a document. It is felt that a cost-benefit analysis can raise the awareness of librarians, administrators and others concerning costs and use patterns, but cannot be truly effective without the help of sensitive value judgment. This paper presents preliminary findings of an ongoing cost benefit comparison of documents between two academic libraries. In this present experience of UL, JNU has more number of library users in comparisons to UL, DU.

**Keywords:** Cost-benefit analysis, Acquisition, Books, University libraries, University of Delhi, JawaharlalNehruUniversity, Delhi

## **Critical Information Literacy: matching theory and inquiry**

*Dr. Rosemary Green*

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**Abstract:** Theory gives us the language to express what we find in our research and the means to understand those findings more deeply. When a research projected is guided by a qualitative orientation, analysis through one or more theoretical frameworks becomes a required aspect of the study design. In this paper, I reflect on my engagements with critical information literacy (Elmborg, 2006; Kapitzke, 2003; Pawley, 2003) during the process of conducting doctoral research into individuals' pedagogical and literacy experiences with the doctoral literature review. Inexperienced with applying theory to research, I encountered a wide range of challenges while attempting to identify a suitable theoretical perspective and align that perspective with my study. Even as I was well into data collection and early analysis, I sought a theoretical foundation that could provide the interpretive depth that matched the richness and complexity of the body of narrative data and an unexpected range of thematic categories. In a critical shift, I began to view one area of doctoral literacy – information literacy – as a domain infused with language of authority and representative of institutionalized separations among librarians, learners, and others. I adopted the framework of critical information literacy, an interpretive approach that is concerned with learner-centeredness and that questions the mechanistic view of information literacy. Ultimately, I learned to adjust my theoretical assumptions and allow the theory to match the study. The study – and I as researcher – benefited greatly from theoretical engagement. I will provide examples from my process of theory discovery and learning to immerse myself in and trust the interplay of data collection, early analysis, reflection, and purposeful reading. This paper will be of relevance to doctoral students and faculty, information literacy educators, and others interested in the use of theory in qualitative inquiry.

**Keywords:** Critical Information Literacy, Critical theory, Information literacy – Study and teaching (Higher), Doctoral literature reviews, Doctoral pedagogy

# **Crossing the library divide: understanding Arab international students' perceptions of the academic library**

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**Abstract:** Today, globalization allows for easier movement of goods, services, people and information. Technology has further assisted in the integration of economies and cultures, greatly changing the environment of the global library. Libraries in the United States now serve a more diverse population of patrons both in house and online with accessing and using information available in a variety of formats. Academic librarians in the United States have the task of serving a patron population that is constantly changing due to visiting scholars and student exchange programs. The twenty-first century librarian plays a vital role in our diverse, global environment. Varying standards of education and information access, impact the way that international students and scholars use information for academic purposes (Amsberry 2010). Differences between institutions in the West and Middle East are chronicled in an article by Wand (2011), which discusses the collectivist culture of the Middle East and its influence on how students learn and use the academic library. Taking into account cultural differences that globally conscious librarians will encounter in serving diverse patrons in general and patrons from the Arab world in particular, this paper will present the findings of a qualitative case study involving the information experiences of Arab international students studying at a public university in the Midwestern United States. The participants' experiences were examined through the lens of social constructivism, in which meaning is constructed on the individual level and is a reflection of social interactions, history, and culture (Creswell 2007). During semi-structured interviews, participants were asked about their past and present experiences with seeking and accessing information in both their home countries as well as during their time as students in the United States. Implications of these experiences on the ways in which students perceive and use information and libraries and how this impacts both their personal and professional lives as students is also discussed.

**Keywords:** Information literacy, Cultural boundaries, International students, Academic libraries, User needs

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# **Crowdsourcing and pedagogy: some reflections on the museum as collaborative learning space**

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**Abstract:** Recent years have seen the relatively staid and conservative environment of the museum access the potential that is the new wave of new technologies incorporating Web 2.0, the Social Web, Netknowing and Net Collaborative Practices for collaboration and ubiquitous learning. Some – only a few, as of yet - have embraced the use of 3D game technologies for the purpose of developing affordable, easy-to-use and more pleasing virtual environments, a process some have termed “edutainment” and which incorporates great potential for both formal i.e. mediated learning and informal and group/peer-based learning outcomes. Virtual reality technologies contain enormous potential for the provision of more vivid or enhanced aesthetic experiences on the part of new museum visitors, whether these visitors are physically-present or engaging with the exhibits within the virtual world. On the face of it the task of creating and replicating museum exhibits and spaces within the virtual environment sometimes appears complex or costly in terms of time, effort and resources expended. In this paper we propose a more collaborative approach to the design of the virtual museum space, one which can provide a solution to the need for affordable and engaging amalgam of exhibits and information and one which can overcome many of the traditional limits which museums have traditionally faced. In this paper we propose an outline model for engaging an online community in the continuous development and improvement of a museum space with the potential for collaborative and net-based learning. The model proposed in this paper is based on observations within communities and museum spaces in the 3D online world *Second Life* and on our own experiences with a community students collaborating on the development of a shared 3D virtual space.

## **A crowdsourcing tool for cultural heritage: design and evaluation**

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**Abstract:** Boundaries between digital collections of cultural institutions are becoming increasingly fluid as libraries, archives and museums converge towards common models for information access and discovery. A range of new information services and applications is emerging that facilitates a more participative relationship between memory institutions and their users. The study described here discusses the design methodology and the assessment strategies of a crowdsourcing tool developed as part of a suite of applications that provide integrated access to digital resources of jazz history collections from archives and libraries.

While the densely interconnected nature of the jazz community is well documented in archive, library, and museum collections, uncovering the complex network of social relationships held by jazz artists remains a challenge that requires the very labor-intensive process of sifting through massive collections of documents and other primary source materials stored in various archives and repositories. Automated techniques including natural language processing can facilitate the representation of social networks. However, only humans can reliably identify the nature of the personal and professional relationships that occur between people. To harness human expertise for analyzing and

describing interpersonal connections as recorded in jazz history documents, we have developed a crowdsourcing service called Linked Jazz 52nd Street. Named after a street in New York City famous for the concentration of jazz clubs in the 1950's, this tool intends to engage jazz researchers and enthusiasts in analyzing interview transcripts of jazz artists and provide input on the types of relationships described in these resources. Drawn from a survey of relevant crowdsourcing tools in the area of cultural heritage and a broad review of the literature, we identified a series of key principles to guide the design of Linked Jazz 52nd Street. Crowdsourcing is a relatively novel approach and best practices for the design as well as for the evaluation of crowdsourcing platforms remain scarce. Although a single model for developing crowdsourcing tools has yet to be established, the literature on crowdsourcing suggests several important considerations when building a crowdsourcing platform. The most relevant design issues pertain to the successful recruitment and retention of participants and the quality control of the data collected. Various methods for retaining participants will be discussed, including the benefits of offering support forums and relevant techniques for measuring participant reliability, ranging from the use of mathematical formulas to random quality-control review by experts. As for the interface, ease of use is recognized as a critical requirement that can be achieved through various techniques. One method is to divide tasks among participants according to the cognitive load required by each task; another is to divide tasks according to the reliability and levels of responsibility of the individual participant. Determining clear project goals and identifying measures of success appropriate to the focus of the project are also elements to factor in to the design of a successful tool. This study will review the design principles that have been incorporated into Linked Jazz 52nd Street and report on the findings from the first round of an ongoing series of usability tests. We hope this work will contribute to the literature and to the development of innovative tools and services for facilitating access, discovery and use of cultural heritage resources.

**Keywords:** Digital archives, Digital libraries, Crowdsourcing applications, System design and evaluation, Usability testing, Cultural heritage

## **Cultural digitization: Indian initiatives and memory of the world**

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**Abstract:** The present paper discusses about digitization of cultural heritages of India and other parts of the world. The Memory of the World was built on the premise that the cultural society has the responsibility to preserve information about its history and to make it available also for future generations. It also emphasizes the Organisation's role of metadata and delivery and access. Enumerates key projects taken in western countries and also initiatives in India. Highlights main issues regarding manuscript digitization and archiving.

**Keywords:** Digital preservation, Manuscripts digitization, Dublin core metadata standards, Manus Granthavali, Memory of the world

## **Databases' interface interactivity and user self efficacy: tow mediators for flow experience and scientific behavior improvement**

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**Abstract:** Testing the influence user interface interactivity (UII) in databases on Scientific Behaviors (SB) and investigating the flow experience (FE) as mediator between UII and SB, as well as the role of self-efficacy (SE) as an interferer were the aims of this research. 366 Faculty members and Ph.D. students participated as scholars to complete a questionnaire. We made a SB questionnaire through a comparative review of the related literature on FE, UII and SE. Structural Equation Modeling was used for data analysis. We found that the more self-efficient participants, the more they experience user interface interactivity and scientific behavior changes/adaptations. Also, we found those participants who experienced more flow, had more chance to experience SB changes and adaptation in UII environments.

**Keywords:** Scientific behavior, Database, User interface, Interactivity, Flow experience, Flow theory, Self efficacy, Structural equation modeling, Researchers

## **Delivering library services and information research in support of distance education**

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**Abstract:** The study “Away from the Mothership: Delivering Library Services and Information Research in Support of Distance Education” describes library technology, ingenuity, innovation and dedicated teamwork, supports the academic and research requirements of over a thousand students, and faculty studying and teaching virtually from anywhere in the world.

SUNYMaritimeCollege is one of the sixty-four campuses of The State University of New York and the oldest of the six state maritime academies in the United States. The mission of the College is to prepare students for careers in the merchant marine industry. The SUNY Maritime College student experience is furnished ashore and afloat with instructional technology for teaching and learning in the classroom, in library, at sea, and virtually from anywhere in the world.

The study describes the technology for delivering electronic content, such as electronic journals, e-books, digital reproductions of primary documents for the maritime based curriculum, as well as a number of virtual services to online/distances learning students and faculty. In addition, the study outlines the successful development and implementation of a distance learning program where over 110 courses are taught, 49 are exclusively online courses and 50 hybrid courses using technology solutions such as Blackboard.

SUNY Maritime is a very unique institution that adds a new dimension to distance learning. As part of the standards of training certification and license requirements, students are required to participate in three SummerSea terms aboard the largest *Training*



*Ship Empire State VI*, the largest training ship in the United States used for such training. While at sea, they visit six-eight European ports. The floating campus of over 1,000 students, faculty and staff is fitted with classroom technology, computer labs and a fully functioning research library with access to an automated library system, electronic databases for research and scholarly content. The Ship's library is equipped with several computer workstations working off a several local networks, including several types of servers that are connected with the Ship's intranet and the Ship's satellite communication systems to provide access to email. All library computers aboard the training ship provide access to electronic publications, data banks, various training software and an automated integrated library management system. The study describes how technology meets the information and research requirements of students and faculty at a remote location such as the middle of the Atlantic Ocean. The library has successfully managed to deliver the electronic content of scholarly material in a highly specialized area of undergraduate studies through the innovative technology aboard the training ship to in support of the academic curriculum that is taught at sea.

## **Demographic change and public libraries – large-print and audio books are not enough!**

*Prof. Dr. Petra Düren*

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**Abstract:** Demographic change needs to be considered in public libraries. It's one of the most important aspects and challenges in libraries in the upcoming years – especially against the background of constantly decreasing budgets.

Nowadays several ideas for new services for older people can already be found, such as a media delivery service – library volunteers who bring books and other media to older people – (for example practiced in the public libraries 'Bücherhallen Hamburg'), links and programmes targeting those aged 50 and older (for example a collection of '50+links' can be found at the homepage of the New York Public Library) or special older adult events, for instance programmes with speakers or films as well as computer classes.

In two public libraries in Hamburg and Wedel quantitative research projects took place to find out what older people expect from libraries and what they don't want or need. It can be seen that questionnaires are a good method to learn more about older users' needs and wishes concerning their library. For one of the above mentioned surveys not only active users of this public library have been asked to complete the questionnaire but also former users as well as non-users.

**Keywords:** Challenges, Demographic change, Public library, Quantitative research, Questionnaire, User survey

## **Designing an exploratory mixed-methods study: challenges and opportunities for LIS researchers**

## *Colleen S. Harris-Keith*

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USA

**Abstract:** To date, library and information science research has largely failed to take advantage of rigorous mixed-methodology research design. This paper provides a case study of designing a mixed-method research project exploring the career trajectory of academic library directors. The paper focuses on the design of the project, from inception of the idea to the iterations of the research questions, delving into how the LIS researcher and practitioner can prepare for issues of reliability and validity, questionnaire design, interview design, and both qualitative and quantitative data analysis. The pitfalls and benefits of choosing mixed methods as a research design will be addressed. The paper concludes with lessons learned that will be of use to other LIS scholars and practitioners interested in pursuing mixed-method research agendas.

**Keywords:** Mixed methods, Research design, Leadership, Career trajectory, Academic libraries

## **Developing a database of “harmful” books in Japan**

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**Abstract:** In Japan, the campaign against pornographic and violent books was widespread in 1950's, and the local regulations on teenagers were enacted in all the prefectures except Nagano. Books rated as “harmful” to teenagers by such regulations are called “harmful books”. Harmful books are restricted in the market, for example, they are displaying keep away from youngsters under 18. The restriction on harmful books has certain relation with themes such as intellectual freedom, intellectual freedom in libraries and censorship, and is one of the important topics of library and information science in Japan.

This paper shows the problems such as the dissipation of information relating to the books rated as harmful and the difficulty to bring out the current situation of the restriction. For instance, we were not able to discuss about what kind of books are most frequently rated harmful in a quantitative way. Then, we will propose and build a database containing information of books rated as harmful by respective prefectures so as to facilitate quantitative and qualitative investigation. As of now, we have completed the development of database, it has a record of about 10,000 items, which were all the books rated as harmful by Tokyo, Ibaraki and Mie prefectures who are interested in harmful books can search for the books using this database.

**Keywords:** Censorship, Evil/Harmful Books, Challenged books, Intellectual freedom in libraries, Pornography

## **Developing a mixed qualitative and quantitative research design to inform library policy decision-making**

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**Abstract:** When faced with the need to make decisions about library policies, such as offering new services, discontinuing existing services, or marketing underutilized services, administrators often need to better understand patron expectations of the library. For example, if new services do not meet the expectations of patrons, these services may not be used or appreciated and resources devoted to developing these new services may be wasted. Also, if existing services are seen as essential to patrons' expectations of a functioning library, patrons may react negatively to discontinuation of these services. In addition, communicating with patrons about policy changes without fully understanding their expectations may result in marketing campaigns that are ineffective, misunderstood or ignored. Therefore, understanding shared patron conceptualizations of library functions is essential to successful policy development and implementation.

In this presentation, we provide an extended example of a mixed qualitative and quantitative research design for identifying the shared conceptualization of library functions. We discuss methods of collecting and analyzing data from the field of cognitive anthropology, including freelist, pile sorting, and cultural consensus analysis. These methods are designed to explore a domain of information that may or may not have strong cultural agreement, to identify the culturally salient elements of this domain, to identify which elements are core elements and which are peripheral, and to provide a means of testing if there is cultural agreement for the domain in a particular population. We will apply these methods to the domain of a library's function on a university campus in the United States and discuss the usefulness of these methods to the development and implementation of library policy.

## **Developing, evaluating and managing library with agile methods**

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**Abstract:** Agile methods often refer to software development methodology and practices used in software industry but the elements and principles of agile methods have been used also for operational development in various organizations. In general, the agile development process means an incremental work process that promotes the importance of customer satisfaction, collaboration, communication, teamwork, good quality and planned follow-up practices.

This paper first presents an overview of agile methods after which it addresses the most relevant ones for developing, evaluating and managing the academic library. The paper discusses the utilization of these methods in the context of an academic library presenting the case of Tampere University of Technology Library. The library made an early adoption of the methods in its development projects during 2012. The paper refers to concrete initiatives that have already been taken to improve development processes as well as discuss the challenges when applying agile methods in order to change quite traditional working culture.

After a short practical experience of implementing agility into developing processes, the following elements of agility can be considered the most effective and relevant: appreciating the needs of the customers, eliminating the waste, quality assurance, ability to redesign and make decisions fast, and empowering the team.

To conclude, the paper discusses what the library can achieve by adapting a fresh approach for developing, evaluating and managing its operations and how the library staff can benefit from the agile way of working.

**Keywords:** University libraries, Operational development, Development methods, Management, Quality, Customer satisfaction

## **Developing student Peer Mentorship in the library: a case study of librarian and student collaboration**

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**Abstract:** In the fall semester of 2010 the University of Saskatchewan's Murray Library piloted a Library Peer Mentorship initiative as part of a broader Peer Assisted Learning program offered by the University Learning Centre which focuses on math, stats, and writing help, study skills, and learning communities. As partners in the Learning Commons with shared space in the library, it made sense that the program should expand out to include library research skills as well. Because this was forging into new territory for the library it seemed most appropriate to shape the program collaboratively with the students involved, rather than assume that librarians knew exactly what peer learning and mentorship means for students and how it might be applied most successfully in the library context.

Building a Library Peer Mentor Program is certainly not without its challenges. This case study however, highlights the value it provides to both students and librarians who participate in such a program. Through peer mentoring students develop leadership qualities and become active and engaged learners while developing library research skills for themselves and assisting peers. The benefit for librarians and other library employees who work closely with these peer mentors is the opportunity to be more relevant and meaningful in the academic lives of students and to have an impact on their success by engaging with them in less traditional ways than in the past. This kind of collaboration, rather than as teacher or employer, fosters a different type of relationship between student and librarian, one that creates opportunities for each to be equally involved and engaged in teaching and learning within in an informal and mentoring model. While the program and number of peer mentors is still small, there are further collaborative opportunities for exploring library peer mentorship more broadly across the library system and into areas of the campus that librarians are not always able to find themselves.

**Keywords:** Student peer mentorship, Collaboration, Engaged learning

## **Development and implementation of qualitative statistic data gathering methodology in acquisitions and technical services in an academic research library**

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**Abstract:** Quantitative data has long been the traditional assessment measure of work in libraries; this is especially true in Technical Services departments, where historically volume counts = cataloging = labor accomplished; however, as collections and material integration processes have changed, so have the tasks, effort, knowledge and so on associated with the work. To be a successful library and plan appropriately for the future, it is vital that administrators recognize these changes and adapt data gathering techniques that best measure and represent accomplishments for our organizations. This session proposes to demonstrate how the Acquisitions and Technical Services department at the University of Alaska Fairbanks integrated qualitative statistic gathering methodology alongside the quantitative to effectively record work effort using an adaptive scale tool and applied formula, called the LEAD Scale. Developed following the success of the READ Scale, (Reference Effort Assessment Data)©, the LEAD Scale (Library Effort Assessment Data)© is an easily adaptive 1 – 6 sliding scale tool that records the training, skills, effort, knowledge and expertise required for accomplishing work in a library. The presentation will be comprised of two persons consisting of the Scale developer, Bella Karr Gerlich, Dean of Libraries, UAF who will introduce the LEAD Scale and formula and Natalie Forshaw, Head of Acquisitions and Technical Services, UAF who will present how department staff collaboratively worked to assign their unique tasks and processes respectively to the applicable ratings of the Scale instrument. The panelists will demonstrate the success and or shortcomings of applying the Scale methodology to their specific areas, and make recommendations for future development.

## **Development and use of age-appropriate health Information literacy assessment tools for pre-teens**

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**Abstract:** Very little is published on Health Information Literacy (HIL) assessment tools for pre-teens and this is a new pedagogical challenge for HIL educators. This paper aims to fill this gap and describes strategic approaches used in the development of age-appropriate tools to assess HIL abilities in 11-12 year old children enrolled in inner city schools lacking regular information literacy instruction.

The assessment tools included pre- and post- program questionnaires, and a 10-item checklist for evaluating web sites. They were the result of a 7-year collaborative HIL outreach initiative of librarians and faculty from a pharmacy college in partnership with a public library, a museum, the local department of public health, and an elementary school. The assessment instruments were aligned with the goals and objectives of the project which were to: 1) Improve HIL knowledge and skills of 6<sup>th</sup> grade students, that is, abilities to find quality health information web sites and to evaluate health information on the Internet, and 2) Increase the knowledge levels of lead poisoning of 6<sup>th</sup> grade students, specifically the sources and symptoms of lead poisoning and actions to take to prevent lead poisoning.

Identifying key HIL skills that children need at this age was an important consideration in developing the assessment tools. The U.S. Medical Library Association defines HIL as “the ability to recognize a health information need; identify likely information sources and use them to retrieve relevant information; assess the quality of the information and its applicability to a specific situation; and analyze, understand, and use the information to make good health decisions.” The assessment tools evolved over the years. Early versions were comprised mostly of open-ended questions that required students to explain their thought processes for addressing the questions. These proved to be difficult for students to complete and cumbersome for the authors to analyze. The current versions are easier to administer, complete, and analyze. Much of the texts have been replaced with pictograms, multiple-choice questions, rating scales, and fill-in-the-blanks items. Improving the readability level of the HIL assessment tools was another important consideration. The Flesch-Kincaid Grade Level readability formula was utilized to bring them to the appropriate reading grade level.

The HIL assessment tools are adaptable and can meet the specific needs of a variety of levels and teaching settings. School, public, academic and museum librarians, and faculty interested in health information literacy outreach to pre-teens will find this paper useful.

## **Development of school libraries in Kenya**

*Dr. Henry D S Kinya*

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**Abstract:** Every school library in the community is unique and different in one way or the other; by the user's needs and services required by those it services, and so, it should be reflected in distribution of its collection. The fundamental roles of the school libraries will be achieved through diversifying and prioritizing collection and services according to the users and the unique community served by the school library. The national education policy, planning and implementation by the government towards development of school libraries in services and resources should be reflected through its general achievement of the education system and national literacy level. Kenya Government policy of 2003 of free primary and secondary education has impacted expansion and usage of school libraries in Kenya.

Currently there are over 15,565 schools both primary and secondary in Kenya of which over 97% are public schools; funded and managed by the government of Kenya. School libraries serve and focus on users who are basically students of the parent institutions through inculcating library culture, accessing and using not only book-based services but also access information on websites through the practical application of ICT in information search, hence laying a firm foundation of national reading culture in the youth. Further, the role of school libraries within the information age context is changing from that of book-based information provider to that of internet service provider and so is

the roles of librarians; changing its old-age manual operations of print to print service to that of library networking to facilitate information sharing services and activities fundamentally requires the new dimension of trained manpower in ICT in school libraries. In this paper, Introduction of education system in Kenya, development of school libraries in Kenya, number of schools in Kenya, library system in Kenya, the role of school libraries in Kenya and the role of public libraries in Kenya has been discussed.

**Keywords:** Introduction of education system in Kenya, ICT, Universal Basic Education (UBE), Library system in Kenya, Development of school libraries in Kenya and the role of school libraries in Kenya

## **Different missions, common goals – debates surrounding museum-library collaborations: a case study of the Hong Kong Maritime Museum**

*Kitty But<sup>1</sup>, Patrick Lo<sup>2</sup>, Robert Trio<sup>3</sup>*

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**Abstract:** Established in 2005, the Hong Kong Maritime Museum (HKMM) is a relatively new private museum that aims to collect all forms of materials related to the development of boats, ships, maritime exploration and trade, and naval warfare on the South China coast, as well as its adjacent seas. The Museum does not only serve as a unique platform for teaching and learning of the local heritage in Hong Kong, it also contributes greatly to the promotion of community engagement and social connections. The HKMM is also equipped with its own museum library, and it is called the CSSC (China State Shipbuilding Corporation) Maritime Heritage Resource Centre. In addition to supporting various research activities carried out by the Museum, this Resource Centre also serves as a central, and yet comprehensive repository for publications and other archival documents on maritime heritage and history related to Southeastern China.

This paper aims to compare the distinctive operational practices, and user needs between museums and libraries. It also examines the benefits and challenges of museum-library collaborations in the new knowledge-driven society. This paper features an interview with Kitty But (*Librarian, CSSC Maritime Heritage Resource Centre, The Hong Kong Maritime Museum*) and Robert Trio (*Project Officer for Technology, Hong Kong Maritime Museum*), and in which they discussed their professional experiences in the fields of audience education; the implementation of different new technologies associated with the museum and library services; and various collaborative initiatives carried out between the Museum and the Resource Centre. Upcoming challenges and opportunities faced by both the Museum and Resource Centre are also discussed in this paper.

# Digital Information Literacy of Oslo Public Library professionals

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**Abstract:** Information literacy is no more a concern of academic and research libraries only. IT development and digitizing, growth of multiculturalism and fragmenting of local communities and continuous economic pressure on the public sector have put fundamental challenges on public libraries worldwide. With the changing feature of public library services and facilities, it has become a vital concern for public library also specially due to digital resources and information. Easy access to information through the Internet has made many people very self-confident about their information skills. The question is, whether they really are as competent as they think they are? Though users are apparently good at retrieving relevant information, they are not always capable of evaluating whether the information is pertinent or even trustworthy. It can be understood how difficult it is for the aged or adult users of a public library to use information in a digital environment. For which, the users ask for digital information literacy services to be provided by the library staff. Knowledge about users' requirement is essential for public librarians, to adapt digital information literacy education to users' needs rather than depending on ideas and perception. This study is motivated by the need for a deeper understanding of Oslo public library professionals' perceptions about digital information literacy. The main purpose of this study was to investigate present practices, strength and weakness, impact, and challenges of digital information literacy of Oslo public library professionals. To achieve this, the study also examined how the Oslo public library staffs perceived their digital information literacy, what kind of digital information literacy practices they were engaged in, how they could improve and so on.

This study used qualitative approach as it aimed to investigate strength and weakness as well as how to improve digital information literacy of Oslo public library staff. Moreover, the study also wanted to gain insight of respondents' opinions, feelings, emotions and experiences, which could be more achievable through qualitative approach. A semi structured face to face interview method has been used for the collection of data. The research to combined two kinds of things, a) to collect data about present practices of digital information literacy services conducted by staff of Oslo public library, b) to collect suggestions to improve the services and skills of the respondents. Narrative and discourse analysis method was used for analyzing data.

The findings revealed the staff's concept of digital information literacy, their understanding of user's requirement, present practices in the libraries. It also found out the strength and weakness of the present practice and suggested recommendations to improve the digital information literacy of the public library staff.

**Keywords:** Information Literacy, Digital information literacy, Public library staff, Oslo public library



# Digital libraries & knowledge transfer in the 21st century

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**Abstract:** We are living in the 21<sup>st</sup> century and knowledge is the tool that people and organizations around the world seek. With the evolution of technology the means to seek knowledge have changed and so has the medium of transferring knowledge between 2 sources.

Libraries have traditionally been the primary source of knowledge in a society and with the changing times Libraries need to evolve as well. Digital libraries and e-books form the crux of today's electronic age. In order for societies to learn from each other and for the overall progress of libraries around the world it is pivotal to understand the importance of knowledge sharing and transfer, as well as the protocols needed to do so.

This paper builds on the concepts laid out in my earlier papers around the digitization of libraries and importance of electronic books. The focus is around the details of how a digital library is supposed to work and interact with similar libraries across the world electronically.

## Digital library evaluation criteria from different stakeholders: a document analysis and Delphi-survey

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**Abstract:** The purpose of this study is to identify comprehensive digital library evaluation criteria and to compare perceptions from different stakeholders. Evaluation is often an overlooked aspect of DL development due to the complexity of DLs, multiple dimensions of DLs, and the lack of multifaceted evaluation criteria with corresponding measurements. This study addresses the growing need of the academic library community for a multifaceted framework and practical tools to guide the evaluation of academic DLs. The study is focused on the following research questions: 1) What are the essential dimensions of DLs and corresponding evaluation criteria, and 2) What are the similarities and differences in perceptions of the importance of different evaluation criteria by heterogeneous stakeholder groups?

Based on the document analysis, the authors identified 98 evaluation criteria in ten dimensions of DLs. These ten dimensions include collections, information organization, interface design, system and technology, effects on users, services, preservation, administration, user engagement, and context. A two-round Delphi survey was administered to three types of stakeholders of DLs including scholars, digital librarians, and users. Ninety one subjects were recruited with 30 participants from the scholar and user groups and 31 from the digital librarian group. Scholars in DLs were identified based on the search results of Web of Science and Google Scholar. Digital librarians were randomly selected from the top 200 US colleges which have operating DLs according to US News Rank ([www.usnews.com/rankings](http://www.usnews.com/rankings)), and the partner libraries. User group participants, which include faculty members and students, were recruited from five

partner libraries across the country. The first-round survey investigated the importance of the identified dimensions and evaluation criteria from the perspective of the three participating groups. The data from the first-round survey were statistically analysed to compare the perspectives of the three groups using ANOVA test. This paper presents the methodology and the preliminary results of the first-round survey. The preliminary results show that the three groups share similar and different perceptions about what they deem the most important DL evaluation criteria. All three groups considered the dimensions of "collections", "information organization", "interface design" and "effects on users" important. Librarians rated the dimensions of "preservation" and "administration" as more important than the other groups, while scholars and users perceived the dimensions of "services" and "context" more important. Moreover, similar and different perceptions of specific evaluation criteria under each dimension from different stakeholders were also identified. In addition, evaluation criteria under each dimension were also ranked based on the survey results. Building on the findings of the first-round survey, the second-round survey is planned to investigate the appropriateness of evaluation measures to the identified evaluation criteria.

**Keywords:** Digital libraries, Digital library evaluation, Document analysis, Delphi-survey, Evaluation criteria

## **Digital Library of India: an initiative by the government of India for the preservation and dissemination of the national heritage and rare books and manuscripts collection**

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**Abstract:** Digital Library of India is the initiative has taken by the Government of India to preserve digitally and disseminate all the significant literary, artistic, and scientific works of mankind available in India and made freely available, from every corner of the world, for education, study, and appreciation and that of all our future generations. Project started with a primary long-term objective to capture all books and manuscripts in digital format available in India and which are copyright free. The planning started with an aim to digitize 1 million books (less than 1% of all books in all languages ever published) by 2005 in first phase. Presently it has succeeded to disseminate 383049 books with 138705124 pages 40 languages (Indian and Foreign) available in India. The books and manuscripts are available in the website with free access at [www.dli.gov.in](http://www.dli.gov.in) and [www.dli.ernet.in/](http://www.dli.ernet.in/). Government also took initiatives to digitize cultural heritage like facts, monuments, heritage building, temples and manuscripts of thousand years old and walk-through.

The paper will be discussed how the project was initiated and planned and how the project has executed successfully. It will be discussed the expenditure incurred as of today, the sources of fund and coverage in respect of subjects, languages, type of collections (e.g. books, manuscripts, hand written manuscripts in leafs, journals, newspapers etc.), libraries, cities, centers and many more. It will be also described how the different libraries, digitization centres share their resource and network between them for better usage of the documents available since 1985 or earlier.

The paper will be also described the philosophy behind the content selection, duplication of work, and copyright issues policy of the projects. Paper will be discussed the process workflow for the digitization of books which is summarized in terms of three major process elements - pre scanning process, scanning process and post scanning process and

tools used. How it has decided the books are rare collection and which manuscripts to be included in the collection for digitization.

The paper will be provided the present status language wise collection as well as centers wise collection where digitization works done. It has describe the digitization processed used. What are the steps taken for pre-digitization and what are the process used for post-digitization. It will be also discussed what are precautions has taken for preservation of the digitized data and what are action taken for dissemination in the world. Paper will be also discussed what other projects and actions have been initiated to educate and empower human resources and outreach activities to popularize DLI and increase the usage. Paper will be also showed the usage and number pages downloaded in a particular month.

In conclusion, it will be described the benefits derived from the projects DLI, and usage of the initiatives of the preservation and dissemination of the national heritage and suggested future plans to popularize the DLI on rare books and manuscripts.

**Keywords:** Digital libraries

## **Digital Library of the Faculty of Philology**

*Aleksandra Vranes*

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**Abstract:** After the meeting was held in Lund in 2001, in which it was concluded that digitization provides a key mechanism for the use of the unique European heritage and supports cultural diversity, education, and the development of content industries, Serbia has started the process of creating a digital framework of scientific and cultural heritage, the so-called Serbian forum, which should unite all our previous efforts, from those institutionalized, but independently designed, to those predicted and planned by the National Center for Digitization, which should gain new momentum with the project Digital Library of the Faculty of Philology. Although this forum primarily relates to the cultural heritage of our country, that does not mean that the territorial criteria will prevail. The ultimate outcome of this forum would be to create a formal and internationally recognizable form in which there are still national, linguistic, historical and territorial motives profiling the cultural heritage belonging to our nation.

It is an honor and great pleasure to introduce to you on this occasion the project Digital Library of the Faculty of Philology. As an integral part of the University of Belgrade, inheriting two hundred years of tradition of higher education in Serbia, Faculty of Philology started the process of digitization of cultural heritage of its own editions first, which are the backbone of scientific thought in the fields of study of 34 languages, literatures and cultures, studied within its premises, as well as in the fields of library, information and archival science. Until now 107 000 pages of extremely important editions were digitized and made absolutely searchable. This primarily refers to the prominent periodicals of the Faculty of Philology (Yearbook of the Department of Serbian Literature, Philology review, Literature and Language...), as well as editions of doctoral dissertations defended at the Faculty of Philology, proceedings of international scientific conferences, monographs, anthologies and collections. In the next phase Faculty of Philology plans to include within its digital library, by using Microsoft's software in the cloud environment, literary heritage of our own manuscripts.

This project is of paramount importance for both academics dealing with literary analysis and editors of critical editions. Willing to make the digital form of our scientific contributions attractive in form, useful for all researchers, teachers and students, in the so-called "virtual world of organized knowledge", we hope that we have met at least four

requirements: easier access to often inaccessible publications, protection from excessive use, implementation of teaching materials for distance learning, as well as empowering presence of our science, our Faculty and University and our Letter on the Internet.

**Keywords:** Digital library, Digitization, Cultural heritage, Faculty of Philology, Distance learning, Internet

## **Digital literacy and social investigation methodologies**

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**Abstract:** According to Glister, Digital literacy is “the ability to understand and use information in multiple formats from a wide variety of sources when it is presented via computers”.

The revision of the literature included authors such as Bawden, Australian Communications and Media Authority, and Martin. Most of the investigations performed before are quantitative. This has established the interest and concern to discuss the overview of Digital Alphabetization. Also, due to the expansion of technology, which has provoked different ways of communication, mainly in young people.

A questionnaire of 23 items was applied to 19 degrees of the Iberoamerican University because the handling of technologies in their college training was considered important. From these degrees, a population sample from the Division of Social Studies was used: Law Degree and Degree on Administration of International Business. Additionally, from the Division of Humanities and Communication, a sample was obtained from the Communication Degree and Psychology Degree.

The results obtained from the questionnaires will be presented. A comparative method will be used to discuss the findings.

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## **Digital preservation: an open-source architecture**

*Giancarlo Birello<sup>1</sup>, Valter Giovanetti<sup>1</sup>, Ivano Fucile<sup>1</sup>, Anna Perin<sup>2</sup>*

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**Abstract:** CNR-Ceris IT Office and CNR-Ceris Library are involved in a digitisation project promoted by Bess (Electronic Library of Economic and Social Sciences in Piedmont Area, Italy) and commissioned in order to handle all the post-scan of the digitisation process of different collections, part coming from partners of Bess and part from other Institutions of the Piedmont Area (like, for example the “ILLUSTRATO FIAT” review from the Centro Storico Fiat). The Poster analyses the strategies adopted to establish the digital library of Bess and the main open-source software used (Islandora, FedoraCommons, Drupal, etc...).

The repository is OAI-PMH compliant and is indexed in Cultura Italia, OpenDOAR, BASE, The University of Illinois OAI-PMH Data Provider Registry, IESR, ROAR, WorldCat Catalogue, Pleiadi and (soon) also in Europeana.

## **The digital repository initiatives in Ghana – prospects and challenges**

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**Abstract:** In 2008, the Kwame Nkrumah University of Science and Technology (KNUST) implemented the first digital Institutional Repository in Ghana. Six months later and with 560 postgraduate theses entered, KNUST appeared 52nd on the webometrics ranking for 100 best universities in Africa. This success resulted in the Consortium of Academic and Research Libraries in Ghana (CARLIGH) and International Network for the Availability of Scientific Publication (INASP) helping four academic institutions to set up their repositories. This paper looks at how these repositories have met the challenges of technical support, content provision, qualified personnel, institutional backing, achievements and lessons for other institutions thinking of setting up IRs. In depth interviews, observations, checks from the websites, reports and secondary documents from the libraries will be used to collect data for the paper.

**Keywords:** Institutional Repository, Research, scholarly communication, Open Access, Libraries

## **Digitization in polish scientific institution. Case study: Digital Repository of Scientific Institutes (RCIN)**

*Oriana Reizes-Dzieduszycka, Szymon Seweryn*

Institute of the Polish Language of the Polish Academy of Sciences, Poland

**Abstract:** Digitization in polish scientific Institution. Case study: Digital Repository of Scientific Institutes (RCIN) The subject of the paper is the project Digital Repository of Scientific Institutes (RCIN) carried out by 16 Scientific Institutes of the PolishAcademy of Sciences since January 2011 and financed by the European Union as a part of the Innovative Economy Operational Programme. The obtained European Union’s funds

have allowed for the creation of a comprehensive database, which renders available scientific publications within the scope of many fields of knowledge, both the humanities and pure sciences. Modern IT technologies used in the Project have allowed for digitization and publication of scientific materials of dLIBRA digital platform, thanks to which they have become accessible for a wide range recipients. The aim of RCIN is to speed up and simplify information exchange in scientific environment and to archive and protect polish scientific output.

**Keywords:** Digitization, Polish science, IT technologies, Digital libraries

## **Disciplinary information cultures and their implications for evaluating collections in large academic libraries**

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**Abstract:** Academic libraries that have long traditions in serving multidisciplinary research communities usually have large stratified print collections. Many of these collections are now being reduced since warehousing costs are increasing and libraries focus on digital collections. More than before, libraries need to evaluate what parts of the local collections should be preserved and what parts may be digitized, relocated or weeded. The question is, to what extent large academic libraries can successfully manage their physical collections in conformity with the preferences of their patrons. Do research communities have coherent appraisals which librarians should take into account when assessing the value of stratified collections?

Findings from several studies confirm that scholarly appraisals of library collections are not independent assessments, but are anchored in the disciplinary context of the scholars. It has been noticed, that disciplinarity predicts distinct patterns of information behaviour and knowledge processing. Within each discipline, intellectual activities like research design, knowledge validation, and formulation of information strategies follow certain rules and conventions. These rules and conventions constitute mental landscapes in which disciplinary information cultures take shape, develop and get their expression. Hence, the information culture of each discipline may be a key factor in understanding the appraisals of scholarly library users. Accordingly, it is the objective of the article to explore whether identified disciplinary information cultures are of relevance for collection development practices with academic libraries.

Based on a review of the literature, the author identifies four major disciplinary information cultures which differ from each other with regard to the dynamics of the knowledge validation context, and with concern to the linearity of the research design in different disciplines. The author concludes that the more stable and non-linear the character of a discipline is, the more likely it is governed by an information culture that values large stratified local collections. In these disciplines, theory building is an ongoing, often iterative process. Texts and meta-texts store a variety of scholarly thought, approaches, interpretations, as well as methodology, which in many cases preserve their topicality over time and, whenever, may become a subject of renewed interest. Disciplines with predominantly dynamic and linear research traditions, in turn, foster different information cultures. Due to rapid development of methodology, frequent shifts in focus of interest, dynamic disciplines are in continuous state of change. Research in

this context is often progressive, i.e. new knowledge replaces obsolete knowledge. Consequently, also the literature in dynamic fields is constantly subject to rapid ageing. Thus, disciplines with dynamic information cultures are not likely to benefit of exhaustive stratified collections.

**Keywords:** Collection development, Collection evaluation, Academic libraries, Disciplinarity, Information cultures

## **Dividing the cake: how each department gets their share of the book budget at CPUT**

*Michiel E Moll<sup>1</sup>, Petro Coreejas-Brink<sup>2</sup> and Audrey Louise Patrick<sup>3</sup>*

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<sup>3</sup>Senior Librarian: Collection development: CPUT Libraries, South Africa

**Abstract:** One of the key functions of any university library is collection development. At the Cape Peninsula University of Technology (CPUT) this budget is separated into sections for periodicals, databases and monograph acquisition (including individual Audio-visual titles). The purchase of items in the last category is done in partnership with the different academic departments, each of whom expects their own share of this part of the budget. This paper outlines the development of a formula that is used to divide the budget equitably, taking different considerations and statistics into account. It also outlines how each statistic is gathered, and the process of adoption of this budget and its impact, within one specific Faculty. Finally, it shows how the formula is flexible in being able to be easily adapted to meet problems that arose within this Faculty.

**Keywords:** Collection development; Library budget

## **Does evaluation improve performance? – A case study of Japanese public libraries – *Kanako Shimoyama<sup>1</sup>, Minako Nishiura<sup>2</sup>, Hajime Naka<sup>2</sup>, Keita Tsuji<sup>3</sup>, and Hiroshi Itsumura<sup>3</sup>***

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### **Abstract:**

**Purpose** –This study explores the effectiveness evaluation program in public libraries by conducting empirical analysis of selected Japanese public libraries.

**Design/Method/Approach** – We used three methods: 1) the analysis of libraries' performance data; 2) meta-evaluation; and 3) case study.

**Findings** –The evaluation program in the public libraries does not necessarily contribute to the improvement of the service performance. Additionally, the type of the evaluation

(performance measurement or program evaluation) had certain effects on the performance improvement.

**Originality/value** –This study provides new insight into on-going researches on evaluation program in libraries.

**Keywords:** Library management, Library administration, Performance measurement, public libraries, Self-evaluation, Program evaluation, Meta-evaluation, Evaluation studies

## Does “the Open Access” has future?

*Alexander Dimchev*

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**Abstract:** The paper is a brief historical analysis and outline of the contemporary issues of the ‘open access’ initiative. The beginning of the ‘OA’ movement to scientific publications emerged in the 90’s of the 20<sup>th</sup> century and was associated with the possibilities of providing free and quick access for scientists to scientific information online, as well as the idea of overcoming financial barriers. The main ideas of forums, held at Budapest (2001), Bethesda (2003) and Berlin (2003) are presented together with the main courses – the “green” and the “golden” roads, their advantages and shortcomings. An attempt is made of an evaluation of the chances of acceptance and application of the two strategies by the scientific community, publishers of periodicals. Barriers and challenges before OA are presented. The conclusion is made that part of specialists consider OA a revolution in scientific communications. They are aware of the high expenses and low productivity of the traditional approach for ensuring access to scientific knowledge and also review the occurring processes as a catalyst to changes in the philosophy of the organization of research work towards a road leading to higher quality and efficiency. The expectations are that the changes shall be fundamental, thus exercising their influence on the entire chain of research as a whole. The evaluations in the paper are carried on the basis of analyses and studies of the evolution of open access in the past decade. On this ground the conclusion is drawn, that in spite of the difficulties, barriers and resistance, achievements so far speak of optimism for OA. The first steps are taken in this respect towards the creation of a more effective and cheaper global network for communication in science, which possess and distribute enormous data bases. The system should outline the road to coordination and relationship within particular fields of knowledge. It should also resolve a basic question, namely the possibility of the representatives of research communities at large, regardless where they are, to work in an interactive mode throughout the entire research cycle – from the exchange of ideas, research methods, instruments, data, information to the final result and knowledge. The idea became popular through the term ‘social productivity’. It shall lead to a change in the work of researchers and the philosophy of science. Such changes shall have a



decisive role not only for researchers and library information specialists, but also for the research community at large and the participants in the communication chain - authors, publishers, distributors of information and literature, bookshops, advertising agencies, creators of data bases, together with management bodies and commissions, dealing with knowledge and information. It is early to claim a light transformation and substitution of communication channels in science. Traditions and conservatism, even conflicts offer some advantages. What is essential is that in the coming years a balance is reached. Hope for this is to a great extent in OA.

## **eInclusion and public libraries: a literature review**

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MA University of Tallinn, Estonia and Energy Charter Secretariat, Brussels, Belgium

### **Abstract:**

**Purpose:** The aim of this paper is to review how has been explored the eInclusion concept in the European and Estonian context. As sub part of this research, the author chose to focus on the Public libraries and some examples of implementation the e-Inclusion concept.

**Design/methodology/approach:** Peer reviewed articles have been selected mostly from EBSCO host databases, Emerald, Google scholar, Mendeley and European Commission Catalogues (ECLAS) using a simple search technique, in both full text search and keyword search using Boolean operators. More than 40 sources were reviewed. Terms and phrases such as “eInclusion”, “digital inclusion”, “digital divide”, “digital gap” and “public libraries” have been applied for the searching. Relevant articles in English and Spanish languages have been selected and reviewed. In addition, books, book chapters, organisational websites, official reports and blogs were also used for this review.

**Findings:** eInclusion has been defined and viewed from different angles, but all of them focused on the need to work on a larger scale in the European and Estonian environment in order to overcome the digital divide and integrating all social groups in the use and exploitation of information technologies. The public libraries appear as institutions which play a crucial role in shaping digital gap.

**Originality/value:** This literature review was made based on a number of previous literature but the researcher believes that it will have a value in raise awareness of the public libraries managers in the importance of access to electronic information from everyone, and create policies addressed in eInclusion issues, in order to integrate the most vulnerable people in the information society.

**Keywords:** eInclusion, Digital divide, Public libraries, European Union, Estonia

## **E-reference services in university libraries: the example of Hacettepe University Libraries**

*İpek Şencan, Meriç Dirik and Müge Akbulut*

Hacettepe University Department of Information Management, Ankara, Turkey

**Abstract:** Reference services are one of the most important and the most active services in libraries. Reference services are started to continue as electronic with the impact of the technology, new platforms and tools. In this study, electronic reference services which are served in university libraries will be introduced and the electronic reference services which are lasting in Hacettepe University Libraries will be handled as the example. The aim of this study is, to exhibit the applications about e-reference services of Hacettepe University Libraries and to obtain the deficiencies. It will be a descriptive study and an interview will be done with the librarians who work in the reference department of these libraries. The reason for selecting the university libraries in this study is that they have intensive research activities because their users need more specific and detailed and also most of time quick information and contribution. Accordingly, we can observe the impact of the electronic media to the reference services more clearly in these centers.

**Keywords:** Reference services, Electronic reference services, E-reference services, University libraries, HacettepeUniversity

## **An ebook is not a book is not a book**

*Roxana Theodorou*

Head Librarian, Hellenic American Union, Greece

**Abstract:** The future of the book is one of the favorite discussions of our time (and professional circle). It raises great disputes, arguments, assumptions, angry debates, hopes and expectations. The publishing industry is facing a technological change that is shaking it from its foundations and forcing it to change. Violently, forcefully and urgently. And the truth is that publishers have been resisting change quite successfully for a long long time, more than anyone could actually foresee. So long, in fact, that they created the illusion that, maybe, there is no need to change. Things can still be as they always were, and the electronic versions of the print book are just that: versions of a

thing that already exists for hundreds of years. And we can go about our businesses as usual.

But the truth is that eBooks are not books. They are not even something more or something less than books. They are something entirely different, a publication genre of their own. Just as cinema is not a taped version of the theatre, for instance. The problem is that, although eBooks are, comparatively, a brand new thing, we haven't, yet, figured out how to produce, design, use and make the most of. We are conceptually bound by the limitations of the print book and somehow "afraid" to fully explore the potential of this new invention.

But, to be honest, the publishing industry is just a business and has to produce profits. Committing in some new invention, that nobody actually knows how to use, and creating totally new products, requires quite a big investment and involves quite a lot of risk. But there is a segment of the publishing industry that can be used as a basis to experiment on, which is open, receptive, responsive, strict and enthusiastic. And that is the children's book market.

Children have no preconceptions as to how a book *should* look like, how it should be used, and what is actually offers. They are more apt to use (and play with) anything as long as it is interesting to them. In fact some of the most successful applications of a new eBook concept have some from children's books. eBooks are not meant just for reading text. That is done perfectly by regular print books. eBooks offer so many additional possibilities to transmitting information that it seems sticking to text as wasted potential of the medium.

This presentation will try to demonstrate what we can learn from children's eBooks so far, what we can find out in the future and how all this can be used to transform the eBook to something really useful, and revolutionary. The ultimate goal is to present new angles to the way we see eBooks, and, hopefully, help create a new information medium.

## **Ebooks or pbooks? Does subject discipline affect format choice in the humanities?**

***Lynn Wiley and Tina E. Chrzastowski***

University of Illinois at Urbana-Champaign, USA

**Abstract:** Ebook adoption in the Humanities disciplines has lagged behind that in the Sciences and Social Sciences. Is ebook evolution leaving a segment of our researchers behind? Are humanists' scholarly research needs well matched with the ebook format? If not, why not? With some publishers moving ahead with a format migration to ebooks, how will humanists, and the libraries that support them, respond? To answer a myriad of questions surrounding ebook adoption in the humanities, a multi-phased research project, funded by a grant from the Institute of Museum and Library Services (via "LibValue," <http://libvalue.cci.utk.edu/>) was undertaken at the University of Illinois at Urbana-Champaign Library (UIUC). At its core, the study centered on PDA (patron-driven acquisition via STL - short term loan) collection use through Ebrary and Oxford University Press titles. Pertinent to the study were the availability and use of corresponding print books at UIUC and the factors that determine why a humanities scholar would choose either an ebook or a pbook (print book). Data were collected on PDA and STL use of humanities ebooks in architecture, art, art history, classics, music and theology. Circulation of corresponding (duplicate) print books was also documented; in addition, focus groups were conducted with approximately 100 faculty and graduate

students in these disciplines in order to determine the thought process and reasons for format selection. Specifically, the study asked scholars to comment on where they view the adoption of ebooks in the humanities to be in the next 5 years, the value they determine or receive from the use of ebooks, their familiarity with various ebook platforms, the role of print books in an e-future, and when or why they would choose to use an ebook over a pbook. While the study's outcomes focus on assessment of the humanist's perception and use of ebooks, assessment of the library's role in this evolution is also an important factor. Library assessment for this project focused on performance and use of collections (both e and p), and included data by call number/subject, publisher and price. The assessment also included the availability and accessibility of both e and p books. The study was implemented with the PDA component in November 2012; focus groups were conducted in spring 2013. Data from the study will be available to be reported by June 2013.

## **Education for digital preservation in Asian Pacific Countries**

***Prof. Dr. Ahmad Bakeri Abu Bakar***

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Malaysia, Kuala Lumpur, Malaysia

**Abstract:** Library and Information Science (LIS) has always been a field concerned with the education of future librarians and information professionals and with the emergent technologies that pervade the teaching and learning process it is imperative for the LIS educators to take stock of the shortcoming in the typologies of the courses being offered to the potential information professionals in their programmes.

One of the courses that seem to be marginalized by LIS educators is digital preservation. A study done by a researcher on Digital Library education based on the curriculum of 13 accredited and highly-rated library schools found only 2 library schools have shown interest in offering digital preservation in their programmes. All of us realize that we actually do not know how much longer that we are able to preserve the printed and published materials even though the materials were surrounded by controlled climate of temperature and humidity. What about the fragile materials such as manuscripts which are so important that national borders could be legally changed by virtue of the evidences found in these manuscripts. All these point out the criticality and the benefits that digitization has in shielding fragile materials from being rotten and broken to pieces.

From the foregoing it is important for library schools to be concerned with digital preservation and access. Apart from the Digital Library course which is becoming a common course offerings, digital preservation course needs to be treated the same. This paper aims to examine the extent of offerings by library schools in digital preservation course

This paper looks at the state of education in digital preservation in Asian Pacific countries. Academic programs offered at the post graduate level by the Department of Library and Information Science or other Departments which can be categorized as similar or equivalent to the Department of Library and Information Science are surveyed in all the countries of Asia Pacific region. A survey will be conducted on the library and information science programs that are able to be accessed through the open web based on the course titles and synopsis.

Findings from this paper may assist LIS educators to develop digital preservation modules and courses that are appropriate for the needs of the respective nations.

## **Educational opportunities of MOOCs (Massive Open Online Course)**

***Ravinder Pallikonda***

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Master in Digital Library Learning, Estonia

**Abstract:** A Massive Open Online Course (MOOC) is a recent innovation in education aiming at large-scale interactive participation and open access via the web. There are very few studies that have explored these initiatives as MOOC is a quite new phenomenon. The purpose of this research is to identify the issues facilitators and learners of Massive Open Online Courses are facing. The study adopts a qualitative approach and uses the case study research strategy. Sixteen facilitators and learners were interviewed in various universities across the world. This study attempts to identify the main problems and challenges the facilitators and learners face in MOOCs. It is believed that before setting up a MOOC in an organization we need to consider feasibility of MOOC and also the issues of facilitators and learners. A concerted effort is required from education technologists, facilitators, researchers and universities to solve the issues before setting up a MOOC course.

**Keywords:** MOOC, Higher education, Online learning, Open education resources, Issues, Challenges

## **Effective and efficient models for measuring the value of digital collections**

***Timothy Babbitt***

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**Abstract:** As university library collection assets evolve from physical to digital, how do we know these assets are delivering value for researchers? The fact that many researchers are no longer in physical libraries conducting searches in front of library staff, may lead to questions about the relative value of libraries and their digital collections versus physical collections from a variety of different stakeholders within institutions.

The purpose of this paper is to propose and demonstrate a multi-method framework for evaluating the value of digital collections. The audience for this paper is intended to be librarians, content aggregators, and publishers, and the following topics will be covered in detail:

1. A situation analysis of currently available measurement conventions and tools (Counter V3, Behavioural Analytics)
2. New opportunities for quantitative value measurement including:
  - Return on investment (ROI)
  - The quality of documents/citations
  - Researcher, Faculty and Librarian Satisfaction and Task Completion
  - Use of Segment Analysis

3. A methodology for qualitative review driven by the effective use of segment analysis of quantitative data

## **Effective factors on the managers' creativity in the academic libraries of Iran (Case study: Alborz and Qazvin provinces)**

*Fatemeh Nooshinfard<sup>1</sup>, Mohtaram Agha Alikhani<sup>2</sup>*

<sup>1</sup>Department of Knowledge and Information Science, Science and Research Branch, Islamic Azad University, Tehran, Iran

<sup>2</sup>Master of Knowledge and Information Science and Research Branch, Islamic Azad University, Tehran, Iran

### **Abstract:**

**Purpose:** This study aims to identify the factors that influence managers' creativity in academic libraries of Iran in Alborz and Qazvin provinces.

**Methodology:** The research method is analytical survey. The managers of Alborz and Qazvin university libraries comprise the research population. Total population was 121. Data collection has been done through two separate questionnaires. Torrance Creativity Questionnaire was used to measure the creativity of the research population and a structured questionnaire in order to determine the factors that affect the library managers' creativity. The second questionnaire validity was confirmed by the professionals and experts and its reliability was tested and Cronbach's alpha 0.87 confirmed its reliability. Data analysis has been done by SPSS software.

**Findings:** The results showed that the highest percentage of research population (47%) had average creativity and there were no significant differences between managers' creativity in term of gender, experience, marital status and field of study. The results also showed that there were no significant difference between managers' creativity and organizational factors.

## **The effectiveness of performance appraisal in university libraries: a comparative study of the University of Professional Studies' and Wisconsin International University College Libraries in ACCRA, Ghana**

*Elijah Akuamoah Mensah*

University of Professional Studies, ACCRA (UPSA), Ghana

**Abstract:** This study aims to compare the effectiveness of performance appraisal systems in two different University Libraries in Accra, Ghana - a public and a private university library. It was conducted using the descriptive survey research design. Purposive sampling technique was adopted for the selection of the two university libraries in the Greater Accra Region of Ghana. Forty (40) library staffs were selected using the stratified random sampling technique. Frequency and percentages were the

main statistics used for the analysis of data. The study established that performance appraisals constitute an important aspect of librarianship and that effective performance appraisals provide employees with feedback concerning their performance. The study provides managers with data which they can use to judge future job assignments and compensation. Recommendations were made based on findings.

**Keywords:** Performance appraisal, Performance management, Effectiveness, University libraries, Job evaluation, Performance indicators

## **The effects of research centre establishment on inter-departmental research collaboration: a micro- level co-authorship analysis**

*Fredrik Åström*

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**Abstract:** Research collaboration has been a topic of interest in scientometrics (Abbasi et al. 2011, Katz and Martin 1997, Lee and Bozeman 2005) as well as in qualitative studies of science (Corely et al. 2006, Boardman and Corley 2008, Lewis et al. 2012). Important issues have been the establishment of collaboration networks, the impact of collaboration on productivity and international patterns in research collaboration. However, one question –related to productivity issues – that has been less asked is: to what extent does the formation of research centres have an effect on de facto cooperation between authors being members of the same centre but at the same time being affiliated with different departments at e.g. a University? Wanting to find out whether research activities within an interdisciplinary research centre at Lund University were still primarily organized at department level or if the formation of the centre had led to an increase in inter-department cooperation, Lund University Library were given the task of investigating co-authorship patterns at department level before and after the formation of the centre. Based on articles indexed in Web of Science by the leading scientists within the centre, in combination with department level address data from the local repository Lund University Publications, two document sets were created: one covering the years 2001-2005, i.e. prior to the establishment of the centre in 2006, one covering the years 2006-2010. Both frequency and co-occurrence analyses of the author addresses showed an increase in both number of multi-department authored articles, as well as an increase in both the number and strength of co-author links between departments, after the establishment of the centre.

**Keywords:** Research collaboration, Research centre establishment, Interdisciplinary research collaboration, Co-authorship analysis, Network analysis

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## **Electronic and paper based data collection methods in Library and Information Science research: a comparative analysis**

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University of Ilorin, Nigeria

**Abstract:** Over the past decades, the common practices of data collection by the Library and Information Science researchers have been through paper based method. The revolution brought by ICT which resulted into the birth of the Internet now makes many researchers to see the Internet as a research tool. As the role of the Internet increase in the daily life of people, it has also increase its role in today's educational system as many researchers are now seeing the internet as a social survey tool. While literature has revealed the effectiveness of both the electronic and paper based data collection methods, comparison of the two methods in terms of their effectiveness have been very limited particularly in Library and Information Science and especially from the population of Library and Information Science researchers from Africa in general and Nigeria in particular. It is against this backdrop that this study intends to examine a comparative analysis of electronic and paper based data collection method. It is expected that the outcome will reveal which one is more effective, less expensive, reliable, and safe time than the other. Recommendations based on the findings of the study will be highlighted.

**Keywords:** Library and information science Research, Electronic data collection, Paper based data collection, Data collection methods, Internet, Research tool, Africa, Nigeria

## **Electronic Journal of Academic & Special Librarianship (E-JASL): a bibliometric study**

*Avijit Chakrabarti*

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**Abstract:** This paper presents bibliometric analysis of 130 articles from the journal titled "Electronic Journal of Academic & Special Librarianship (E-JASL)" in ten volumes between 1(1999) to 10(2009). E-JASL is an independent, professional, refereed electronic journal, dedicated first and foremost to advancing knowledge and research in the areas of academic and special librarianship. This journal is published and distributed by the International Consortium for the Advancement of Academic Publication (ICAAP), Canada. The journal is permanently archived in the National Library of Canada's Electronic Publications Collection and Indexed in LISA. The analysis cover mainly the number of articles, authorship pattern, subject wise distribution of articles, average



number of references per article, forms of documents cited, year wise distribution of cited journals etc. It also covers geographical distribution of contribution

## **Electronic registration of publications' downloads from web-site allows to evaluate readers interests and activities**

***Tatyana V. Kaigorodova, Elena V. Zemlianova, Irina A. Kriukova, Anastasia I. Korotkova***

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**Abstract:** The WHO Documentation Centre in Russia based on Federal Public Health Institute created own website (<http://www.whodc.mednet.ru>) for dissemination World Health Organization information among Russian audience in 2004. In total, 961 WHO publications are currently available at the site with e-links for the website of World Health Organization and the website of WHO Regional Office for Europe. The WHODC website has Russian speaking friendly system. The website is fully in Russian which makes it special as WHO and WHO EURO sites have only limited information in Russian. So, the WHO DC website has users not only from Russia, but from NewIndependentStates and other countries where Russian speaking users live. The system of electronic registration of website users and information downloading was installed in the website. With every opening of the WHODC website, the user is registered automatically. By January 29, 2014, the number of pages observed is about 589209; the number of WHO documents downloaded from WHODC website is 167586. Every download and viewing of every WHO publication having e-links are being registered at WHODC web-site. The most popular topics for publications downloading from the WHODC web-site are the following: Child Health, Health Statistics, Health Systems. Among the publications having the highest downloading rank there are «International Classification of Functioning, Disability and Health. Children & Youth Version»; «The Tallinn Charter: Health Systems for Health and Wealth»; «World Health Statistics 2009».

**Keywords:** Bibliometrics, Electronic publications, Websites, Databases

## **Electronic resources: how technology has led the e-resources revolution**

***Ida A. Joiner***

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**Abstract:** In this paper, I will examine how advances in technology have enabled the plethora of electronic resources to be available to library users anywhere, any time, and

on a myriad of devices. If it were not for technological advances, library patrons would still perform research using listservs and CD ROMS instead of online databases that they can access from their iPads, smartphones, laptops, and other emerging technologies from anywhere in the world.

I will discuss challenges faced by publishers, librarians, and users. I will end with lessons learned and what the future holds for technology delivering electronic resources.

Electronic Resources have been in existence for many years. In the past, in order to access electronic information patrons had to go to the library where a librarian would assist them with their research by using the printed card catalog to locate books for them. As technology advanced, librarians were able to load a CD ROM and access electronic databases to assist the patrons with their research. This was followed by accessing listservs and other electronic media. Then electronic databases became available through library networks and consortiums where publishers provided a plethora of electronic databases. Some of these publishers had provided the databases on CD ROM.

**Keywords:** Electronic resources, Apple computer, iPad, Smart phones, Information professionals, Emerging technologies, Laptops, Librarians, technology, Techno-savvy, Notebook computers, Computer tablets, E-learning, E-books, E-resources, Publishers

## **Engineers and information literacy: an oxymoron or a need? Academic and information literacy for future engineers**

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**Abstract:** Engineering studies are mainly based on problem-solving and computer skills teaching. As a result, all students are ICT literate, but are not familiar enough with academic values, process of information communication and use of information resources. One way to solve this problem could be to provide cross-curricular course with that content. An example of possible course could be an academic and information literacy course “Research, Publications and Responsibility in Science” at University of Zagreb, Faculty of Electrical Engineering and Computing for the graduate students.

The aim of this paper is to present functionality of the components of the syllabus for engineering students through mandatory forms of literacy. The paper will present syllabus outline and describe examination model based on simulation of writing and submitting a scientific paper. Test results will be analyzed to prove the efficiency of such examination method, particularly as a long-term model for teaching academic and information literacy.

**Keywords:** Information Literacy, Academic literacy, Engineering students, Computing students, Graduate students, Cross-curricular, Curriculum, Assignments

## **Ethical issues in virtual library communities: the case of Second Life**

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**Abstract:** During the last decade virtual communities, such as Second Life - one of the most widely known virtual world games, have been widely used for educational purposes, as well as for library services.

This paper emphasizes on the unethical and immoral behaviors that rise within these environments. Behaviors such as illegal life-sharing, copyright infringement, spamming and identity deception can be met in everyday life; nevertheless, they can also be carried into the virtual world and in our case in virtual libraries as well. Therefore, it is important to note that ethics should also be applied in cyberspace, where actions are usually detached from the fear of consequences due to the anonymity that internet provides.

Finally, in this paper we propose several ideas that may help control and minimize unethical behaviors in the virtual community of a library. Our suggestion for a safer tour inside a virtual library will be addressed to the library user as well as to the administrator of the virtual library.

**Keywords:** Virtual environments, Libraries, Ethics, Second Life

## **The European vision on scientific information**

*Carla Basili*

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**Abstract:** Through an examination of official documents from the European Commission, the evolution of policies for scientific research in Europe is outlined, as well as their intrinsic connection with the strategies for economic development in the European Union.

Within this context, the analysis focuses in particular on policies for scientific information, that unfolds along different thematic strands of policy, such as access to publications, access to scientific data, research infrastructures, digital preservation and curation.

The above constitutes the institutional bases and the concrete foundations of the research project Information Policies in Science, which is briefly outlined at the end of the paper.

## **Evaluating Makerere University Library's Institutional Repository using the balanced scorecard**

*Monica Naluwoza*

MakerereUniversityLibrary, Uganda

**Abstract:** This study evaluated MakerereUniversity library's Institutional Repository using the balanced scorecard. As a performance management tool, the balanced scorecard has been successfully applied to university libraries in developing countries and also been used for the purposes of strategic planning in other kinds of organizations. Musoke (2010) indicates that MakLib plays a great role in delivering digital content to the university community, Uganda, and the world at large through the establishment of the IR (USDL) that gives access to local knowledge and information in the Ugandan education system. It is manifestly clear that the problem at MakLib is that there has not

yet been a systematic evaluation of its Institutional Repository (IR), and that the BSC is potentially the ideal tool for this purpose. This study therefore investigated the application of the BSC to evaluate the IR at MakLib.

**Keywords:** Balanced Score Card, E-strategy and Institutional Repository

## **Evaluating libraries business services: lessons from Ottawa Public Library**

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**Abstract:** Today's libraries serve a broad range of essential community needs and audiences. The Ottawa Public Library (OPL) is not only about books and reading but like many public libraries in North America it has redefined a much broader niche. The 'Business and Careers Strategy' was developed in response to the City of Ottawa's strategic orientation. A realist synthesis approach was used to test our theory of change in the Ottawa Public Libraries' context. When developing the program theory we amalgamated into the outcomes chain the two main theories of service delivery and capacity building (Funnell and Rogers, 2011). Following this part of the outcomes chain is the theory of action whereby use/re-use of the program can build capacity and empower the entrepreneurs to 1) make informed decisions: ability to start/grow their business or change direction, 2) Improving the competitiveness of small and medium enterprises (SMEs) and finally 3) building a strong business community. We focused this evaluation on the following questions: What are the key variables impacting awareness, use and decision quality? How do clients make an informed decision? Mixed methodologies were used in gathering and analysing data. Data was collected from the main three stakeholders (Ottawa public library staff, clients and partners) through conducting an online survey and semi-structured interviews. Qualitative data was coded and analyzed using Nvivo software. Quantitative data was analyzed using structural equation modeling technique with SmartPLS (2.0) software. Awareness was found to be significantly influenced by the ownership of an OPL card as well as the use of promotional tools. Awareness was also negatively influenced by the number of barriers to using the business services. The use/re-use of the business services was significantly influenced by the clients' awareness degree and the ease of access (accessibility). Finally staff attitude positively influenced the client's decision quality (informed decision) which in turn impacted the clients' satisfaction.

**Keywords:** Libraries, Entrepreneurship, Mixed methodologies, Theory of change

# Evaluating potential and demand of establishing MOOCs in Tallinn University

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**Abstract:** The purpose of this study is to present findings of an investigation about the potential and demand for establishing MOOCs courses in Tallinn University in Estonia. MOOC (Massive Open Online Courses) have been flourished since 2011, as a very new phenomenon in higher education environment. Although, the most of American elite institutions have developed MOOCs, but it gained significant public attention globally, as the New York Times called 2012 the “Year of the MOOC” and the Washington Post deemed MOOCs as “Elite Education for the Masses.”

MOOC projects offer free online courses in massive size of participants that may exceed hundreds or thousands of students in each course. The main objective of this innovation is to reach to people across the world who would not have access to the world class universities, to empower people with education that will improve their lives and the communities they live in.

In this study, the qualitative approach was used and the focus group method and individual interview were applied as data collection methods.

Eleven master students of digital library learning were interviewed in focus group framework and they reflected their perceptions and expectations towards MOOCs. In addition, eight members of academic and administrative staff of Tallinn University were interviewed individually and they expressed their perceptions about the need and potential of establishing MOOC courses.

As, MOOC innovation is still in the first step of progressing procedure, then there are many questions and ambiguities floating around it and especially European approach has missed in this area. Therefore, the current study attempts to widen the horizon in one of the European universities by investigating the demand of students and readiness of the University to develop MOOCs.

**Keywords:** MOOCs, Open Education, Tallinn University, Students, Staff

# Evaluation of quality of the satellite-based Internet services

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**Abstract:** The end-user infrastructure plays a pivotal role on the delivery of expected services to the end-users. It has been observed that the quality of services (QoS) delivery is affected by the weakest component of the full path. The low bit rate of any component in the delivery path is the bottleneck of the overall throughput. Hence, even if the satellite link is technically able to deliver the best possible service to the Internet Service Providers (ISPs), the local infrastructure at the end-user site should be able to

deliver the same to users' premises. The Asian countries observed in this study often have twisted pair copper lines being run to the users' premises. These communication cables are prone to failure and degradation as time passes because of diverse weather conditions. The high bandwidth applications like video streaming, real-time voice and video demands better quality local infrastructure capable of delivering the expected quality.

The study is an attempt to bring forward the effectiveness of data delivery using satellite communication links as the medium, based on the needs of satellite-based ISPs and its end-users. The data communication for the ISPs and its end-users are more or less limited to Internet Protocol (IP) application, hence the present study is limited to the IP data delivery issues over satellite and the QoSs delivered to the end-users of the satellite-based ISPs. A user satisfaction based on a survey conducted with the users of these ISPs, who are actually using satellite based Internet services. To examine the possible variations in the expectations of users, the satellite links to three different countries (Bangladesh, Indonesia, and Pakistan) are observed to gather the possible feedback. The study also examined the technical experimental data collected from the individual satellite links and investigates the QoS issues related to the same.

The aim of the study is to evaluate the QoSs of satellite-based data delivery system. The study identified the satisfaction level on the QoS produced to the end-users of the satellite-based Internet services. The results of the study identified QoSs performance parameters of the satellite-based ISPs and the improvements expected from their end-user community. The study would help to identify if the end-users of the satellite based Internet services are satisfied with the performance and if the existing service provided to them meets their expectation. The analysis of information extracted from this study is further enable the ISPs to improve upon their service to end-user community without sacrificing the QoS. The main objectives of the study are: (i) to review the existing components of IP data delivery via satellite communication system; (ii) to examine the issues related to satellite link performance and to identify potential problems in delivering effective QoS; (iii) to examine basic QoS needs of satellite ISPs for the Internet data delivery to its users; (iv) to study the end-user problems in receiving QoS through satellite-based data delivery system; and (v) to identify the technology gap and propose/recommend ideal service implementation for the realization of QoS objectives.

A total of seven satellite links, located in three different countries, were monitored to observe the QoS parameters. The satellite links used two different technologies (Single Channel per Carrier (SCPC) and Internet Protocol via Digital Video Broadcast (IP-DVB)) to observe any variations in the QoS parameters, with regards to the technology. Both Simplex and Duplex satellite links were involved in the monitoring to bring effectiveness to the gathered technical data. The results showed that the IP-DVB links were being fully utilized by the Internet service providers, with most of the time the link being working on its maximum limit. Hence, there was a need for most of the IP-DVB Internet service providers to upgrade their satellite bandwidth. However, it seemed that bandwidth was not fully utilized for the SCPC links and a lot of extra bandwidth remaining unused. This study tries to identify the prevalent challenges faced by the ISPs, who use the satellite based IP data links and deliver the same to their end-users. The study also tries to examine the problems faced by the end-user community and their expectations from the Internet service providers.

**Keywords:** Quality of Service (QoS), Satellite-based Internet Services, Measuring user satisfaction, Quality of Service on Internet

## **The evaluation of research in the Humanities:**

## a comparative analysis

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**Abstract:** This paper presents the objectives, the methodologies and the preliminary results of an in-progress investigation into the evaluation of research in the humanities, through experimentation in philological-literary and historical-artistic sciences, utilizing the University of Rome Sapienza institutional database, which systematically collects scientifically produced data of the teaching and research staff of the University.

The premise of the survey is that the humanities do not enjoy a special status by virtue of which it can be exempt from bibliometric analysis: internal quality of the research itself, the impact and the importance in the scientific community are all characteristics which belong to the physical sciences as well as to the humanities.

The objective of the research is to develop some tools for evaluating the research that are consistent with the evaluation criteria used in the physical sciences, through the integration of quantitative, qualitative and biblioteconomic tools.

**Keywords:** Bibliometric research, Evaluation, Human sciences, Institutional repository, Impact Factor, Peer review, Library catalogue analysis (LCA)

## Evaluation of scientific productions and illustrating the scientific Map of Middle East Researchers in the field of bibliometrics in 1990-2011 based on Web of Science (WOS)

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### **Abstract:**

**Introduction:** Nowadays progressing in different fields of science and technology is one of the important concerns of societies especially in developing countries. Bibliometrics is among these important and effective fields. Nonetheless no research has been allocated to evaluating the amount of scientific production of Middle East in this field till now. So the goal of this study is Evaluation of scientific productions and illustrating the scientific map of Middle East researchers in the field of bibliometrics in 1990-2011 based on WOS.

**Methods:** This is a survey research that accomplished by bibliometrics method. In this study 116 bibliographic records which produced by Middle East researchers in the date 27/9/1391 has extracted of WOS with exact search between the years 1990-2011 and

studied. In calculating the rate of developing scientific products, cases that had at least one title of scientific product, have been studied. At first, the data saved in personal system in the form of PlainText with the aid of WOS then analyzed by use of HistCite™ software and finally the scientific map of bibliometrics by analyzed data has illustrated with the same software. Descriptive statistics were used in this study.

**Results:** In this study the frequency of scientific production of Middle East countries between the years 1990-2011 was calculated. The results demonstrated that 16 countries in this area have produced totally 116 records in WOS. Because the total scientific production of the whole world is 4613 records between these years so the Middle East have about 2.5% of the total scientific production. Among this area Turkey with 48 records has about 1% of total scientific production and is in the first place in this area. Iran with 41 records and about 35.5% of Middle East scientific production is in the second place and Saudi Arabia is in the third place with 140 records and about 6.62% of scientific production of this area. In the type of resources study, has determined that researchers are willing to present their studies in the form of article and SCIENTOMETRIC journal with 19 records has published the most records among this area.

**Conclusion:** The results showed as regards 1 of 10 of whole world countries are in Middle East but these countries have a tiny proportion of bibliometrics field productions and Turkey in this area has about half of outputs that could have the influence. Also the researchers are more likely to publish their research articles in journals and the journal of SCIENTOMETRIC is higher than other publications.

**Keywords:** Scientific production, Scientific map, HistCite, Bibliometrics, Middle East Countries

## **Evaluation of the need for diversity library residency programs in the United States of America: a quantitative and qualitative approach**

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**Abstract:** In the United States, the library residency (sometimes referred to as a fellowship or internship) is defined as a temporary, entry-level position in a library that targets library school graduates as part of a diversity recruitment and/or new librarian mentorship program. There are fewer than 30 such programs in the USA. U.S. Census 2010 data shows a marked increase in diverse populations in communities across America. The American Library Association Diversity Counts report shows that libraries as a whole have been slow to recruit librarians that proportionally represent the wider population in a changing America. Maureen Sullivan, 2012-2013 ALA president, states, “although the findings show some improvement in the diversity of the library workforce, we clearly have a long way to go.”

We are conducting a nationwide survey of library residency programs in the USA. Questions will address program planning and decision-making, attitudes toward various



aspects of libraries and residents, and the effectiveness of residency programs in context. This information will be used to develop a model for libraries that have existing residency programs or that want to start a similar program.

Our research will paint a picture of the landscape of library residency programs in the USA. A comprehensive survey of both residency coordinators and residents has not been conducted before.

Our paper will focus on residency programs as a form of diversity recruitment for libraries. We will provide a historical overview and case studies of various diversity residency programs across the USA. Graphs and charts included in the paper will illustrate the effectiveness of various program components in recruiting and retaining librarians of diverse backgrounds.

Specifically, this paper will serve as a foundation for strategic planning for future development of libraries and librarians in the increasingly pluralistic, competitive and digital world of the 21st century.

**Keywords:** New professionals, Early career development, Leadership development, Mentoring, Diversity, Internships, Residencies

## **Evidence-based decision making in library management**

*Dr. Asiye Kakirman Yıldız*

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**Abstract:** A fundamental problem of practical sciences such as librarianship is that theory does not always match practice. To put it another way, the idealistic writings in books cannot solve the real problems which are encountered in library management. For this reason, it would be better if managers attempting to solve problems, instead of paying attention to applications which are fashionable in the field of library management and theoretical ideas in books, took decisions with reference to the administrative and economic structure of that particular library. Apart from this, a mistake is often made when managers take decisions based on their own ideas and judgements or on certain ideologies. These decisions which in the course of the decision-making process are made according to opinions usually lead to loss and failure for the institution.

Evidence-based decision making, which is a subject which is relatively new to the field of librarianship, means to use the available data and realities within the existing situation in the best possible way and to stress that a solution which fits one library will not necessarily fit another. In this study, the concept of evidence-based decision making and its importance in library management will be discussed.

**Keywords:** Evidence-based, Decision making, Library management, Librarianship, Decision makers

## **Evidence-based practice: opportunities for health science librarians**

*Neelima Chadha and Harpreet Kaur*

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**Abstract:** The clinical practice environment for health sciences librarians has changed immeasurably. While the core mission for health care delivery in India and the States remains the same, rapid advances in medical technologies and the presence of the Internet has changed the way health care is delivered and the way practitioners and recipients of health care services get information. Health care reform is placing more emphasis on evidence-based practice and comparative effectiveness research. Both of these have implications for medical librarianship. The new roles that health information professionals can and are playing in the new health care environment via: Information Technology related resources are discussed in this paper. The “information practice” and “knowledge services” are examples of the way in which the scope of practice for information professionals in hospitals and other health care settings has changed.

**Keywords:** Health science librarians, Evidence-based practice, Internet, Information technology resources, Evidence-based health care

## **Examining online reference data: quantitative and qualitative approaches**

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<sup>2</sup>Public Services Librarian, Ontario Institute for Studies in Education, University of Toronto Libraries, Canada

**Abstract:** Ask a Librarian is a virtual reference service that provides online research help to university students across Ontario, Canada. The service supports students at nine universities (representing more than half of all full-time equivalents in Ontario) and is staffed by librarians and library school students from those same institutions. All chats that occur within the Ask a Librarian system are recorded and stored by the system. This data set, which consists of transcripts and participant information, currently contains nearly 20,000 records of chats that took place over the last 13 months.

The large scale of this dataset provides an opportunity to employ both quantitative and qualitative methods to gain a broad sense of the state of virtual reference in Ontario and to dig deeper into individual patron/librarian interactions occurring in Ontario university libraries. We will discuss our initial results and address some of the challenges involved in conducting analysis of this massive online dataset. Some of the considerations for working with this data include patron and staff privacy, patron’s English language skills and their impact on the patron-librarian chat communication, and also the differences and similarities amongst the nine distinct library communities that participate in the service.

## **Experimenting with teaching strategies for Information Literacy instruction sessions**

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<sup>4</sup>Associate Professor, Rider University, USA

**Abstract:** Librarians and teaching faculty collaborated to examine a variety of teaching strategies for required second-semester composition classes during the spring 2012 semester. The purpose of the study was to see if there were significant differences between a control group and three different pedagogical approaches for improving student information literacy skills. Pre- and posttests, developed over several years, were used to determine any statistical differences between these teaching methods. The three experimental groups are called Preview, Active Learning, and Multi-Sessions and are described in the next paragraph.

In the Preview group, faculty assigned students to preview the Research Guides prepared for these classes and gave students a graded quiz before the first session with the librarian. In the Active-learning group, the librarian engaged students with a worksheet that had a scaffolding procedure to help students develop structured search queries which were collected and scored with a rubric. A one-minute paper at the end of the second follow up session was administered, collected, and photocopies shared with the teaching faculty. The Multi-sessions group received two instruction sessions on different assignments from two librarians co-teaching the sessions. Multiple follow-up sessions followed each instruction session to allow ample time for students to practice searching. The control group received pre- and posttests with the librarian delivering a traditional lecture with demonstration and hands-on time for students to practice and research their topics. A different online pretest and posttest were used for measuring student learning outcomes. Each test contained 10 multiple choice questions with multi-correct answers. The pretest was given to students prior to research instruction. Classes including all the experimental groups returning for a follow-up session were given the parallel posttest. Each test required two correct answers in the scoring. The Preview group scored slightly higher than the other groups in both pre- and posttests but the differences were not statistically significant among the groups. All participants performed significantly better statistically on identifying a variety of sources than they did on searching effectively in the pretest; but in the posttest students improved significantly on search skills. Qualitative reflection by students on their learning added additional perspectives of learning outcomes to the pre/posttest findings. The authors will share the evolution of the assessment project including faculty collaboration using different instruction strategies, assessment instrument development and analysis of students' IL skills.

**Keywords:** Information Literacy, Evidence-based Information Literacy, Assessment, Librarian-faculty collaboration, Empirical data, Statistical analysis

## **Exploring music domain of knowledge: author cocitation study in the fields of Music Therapy, Music Education and Music Psychology**

*Ana Dubnjakovic*

University of South Carolina, USA

**Abstract:** Music Psychology, Music Therapy and Music Education are emerging fields in the music domain of knowledge when compared with more traditional areas within musicology such as music theory and music history. The three fields are interdisciplinary in nature in that they contribute scholarship and attract contributions from multitude of other fields such as general psychology, education and medicine while also drawing from

each other. While historical studies researching certain aspects of music therapy, music education and music psychology abound, there have been no studies to date using author cocitation (ACA) method to explore relationships between core authors in these music sub disciplines. As a result it is largely uncertain how and if they interact.

The purpose of this study is to 1) identify major researchers in the chosen fields; 2) examine how their publications have been cocited and examine the resulting cocitation patterns; 3) explore their contribution to the development of the music domain of knowledge. The results of multidimensional scaling indicate the authors' horizontal distribution on the map represents subject disciplines with minimal overlap between music psychologist and music educators as well as music educators and music therapists. Furthermore, vertical dispersion of authors on the map is much larger for music psychologist than any other researcher group. Unlike music therapists and music education researchers, music psychologists are trained psychologists, often with minimal training in music. As a result, their research agenda tends to be much broader and the resulting dispersion can be seen as a result of the widely ranging research areas within psychology. Cluster analysis results confirm these results by grouping the researchers into two clusters: the first consisting of music psychologists and the second of music therapists and music educators.

## **Facet analysis as conceptual modeling of hypertexts: methodological proposal for the management of semantic content in digital libraries**

***Gercina Angela Borém Oliveira Lima and Benildes Coura Moreira dos  
Santos Maculan***

Universidade Federal de Minas Gerais, UFMG, Brazil

**Abstract:** This study aims at the construction of a semantically structured conceptual model to help the organization and representation of human knowledge in hypertextual systems, based on the Theory of Facet Analysis and Conceptual Map. A second step in this study is the application of the semantic model to create a prototype called Hypertext Map (Mapa Hipertextual - MHTX) which will be used to implement the BTDECI – UFMG (Thesis and Dissertation Library of UFMG's School of Information Science). Facet analysis was used to categorize the index terms, and established the relationship among them expressed by the links. It was chosen a single knowledge unit, namely a doctoral thesis on the own area of subject analysis (NAVES, 2000) to construct a conceptual model prior to the technological implementation of its prototype.

**Keywords:** Faceted analysis, Conceptual modeling, Hypertext, Academic documents

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## **Faceted taxonomy for accessing digital libraries Benildes Coura Moreira dos Santos Maculan and Gercina Angela Borém Oliveira Lima**

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**Abstract:** This text presents the development of a faceted taxonomy as interface of search for a digital library of theses and dissertations (BDTD). It also proposes an algorithm for the indexing of these documents. Its aim is to facilitate the retrieval of information contained in this kind of document, and to offer structured information and with results which have already been refined for the user. The methodology includes: a) the domain analysis theory; b) the facet analysis theory; c) the method of content analysis, based on Bardin (2009) and using the categorical thematic analysis technique by Moraes (1999) methodological propose. It was observed that the faceted taxonomy created is the simplified representation of the thematic content of the documents.

**Keywords:** Faceted taxonomy, Facet analysis theory, Domain analysis theory, Content analysis, Categorical thematic analysis technique, Scientific communication, Information retrieval

## **Factors affecting Iranian women employees' health information-seeking on the Web**

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<sup>2</sup>Kharameh Public Library, Shiraz, Iran

<sup>3</sup>Khatam-Al-Anbia University of Technology Library, Behbahan, Iran

### **Abstract:**

**Purpose:** This study attempted to discover why Khuzestan Water and Power Authority (KWPA) women employees' look for health information on the Web and what factors affect their information-seeking behavior.

**Methodology:** The survey is of a descriptive and correlation type. The population of this research consists of 207 female employees and the tool to collect the data is questionnaire.

**Findings:** Findings showed that about 83 percent of respondents used the web for health information-seeking. The most important motivation of women to search health information on the web was to decide how they can check illness. Most of them had positive attitudes towards health information-seeking on the web. There was a significant relationship between intent to use health information on the web and income, attitude towards using the Web, motives, as well as experience to use information on the web. The results of multiple regression analysis with repeated entry showed that motives and previous experience were respectively the most important variables to explain the variance of intent to use. However, attitude variable did not play a role in predicting intent to use.

**Results:** The results showed that all variables predicted the coefficient of 19% of the dependent variable coefficient. This suggests that other factors involve predicting the behavior of women which needs further study.

**Originality/value:** This research is the only and the first research conducted in Iran on the topic; hence, the results are invaluable to those responsible for decision-making in different fields.

**Keywords:** Health information, Information-seeking behavior, Web, Iranian women

## **The Fertilia middle school library: children's books restoration and a digital library project**

*Carmen Fois*

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**Abstract:** The library of the middle School of Fertilia, born around 1992. It aims to provide support to traditional teaching and updating of the teaching staff, to carry out activities to promote reading. Aim of this work was the survey on the state of conservation of the volumes and the beginning of a digital library service

**Keywords:** DigitalLibrarySchool library

## **First steps towards Virtual Deposit Library Creation**

*Tomas Foltyn*

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**Abstract:** Valid Czech Legislation prescribes all the Czech libraries to hold their book collections permanently. However, is it possible to proclaim that this statute is the true guarantee of the book heritage preservation for the future? Answer is very simple NO! There is no precise evidence about the documents, which are contained in the preservation collections of Czech Libraries, because of various approaches to these collections. National Library of Czech Republic collections management experts identified that the system for building, enrichment and management of the modern preservation collections is needed. The tool, which was developed for this purpose, is called Virtual Deposit Library. It should allow automating the control over the copies numbers located in the Czech libraries with the preservation obligation, increase the efficiency of offering and requesting lists of documents designated for the collections enrichment (so far sent by emails in word or excel sheets in the amount of thousands items per month) and register necessary information about their physical condition. During the first implemented phase only several libraries with full legal deposit were included in the system (National library, Moravian Research Library in Brno and Research Library in Olomouc), within next phase the system will be extended to all legal deposit collections and to other specialized libraries (e. g. National Technical Library, National Medical Library,) or other libraries with significant regional or special collections. The tool is built on the technical solutions that have been used long time in the National Library software environment as Oracle database, application framework Relief or search mechanism MS FAST. This reduces secondary costs for maintenance and technical support. An integral part of the solution is the calculation procedure for the optimal number of copies estimation needed for future preservation. This part is based on Time Weighted Preservation Index and Annual Loss Rate methods. It defines the connection among the number of the preserved original documents, their digital and microfilm copies, physical conditions in the relation to their preservation in the supposed timeframe. The tool Virtual Deposit Library is developed in the close compliance with the

concept of long term preservation and accessibility of the traditional text documents stored in libraries policy for 2011-2015, which was approved by Czech Ministry of Culture.

## **Focus groups – stimulating and rewarding co-operation between the library and its patrons**

*Eva Höglund*

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**Abstract:** Academic libraries are undergoing massive change. New information resources and technological development as well as new needs among patrons require their active involvement in the development of library services. In order to guarantee a good quality of services a customer perspective is essential. This paper demonstrates how focus group interviews were used to assess patrons' needs and opinions of present and future services at Åbo Akademi University Library. A qualitative method was deemed necessary to get a deeper understanding of patrons' underlying wishes and ideas. This paper also outlines the results gained and the actions taken in response to the results as well as suggests strategies for a continuous development of services based on the needs of customers.

Åbo Akademi University Library carried out two separate sets of focus group interviews. The first one, with students as the target group, was carried out in the autumn of 2011 and the second one, with researchers as the target group, in the autumn of 2012. The focus group sessions involved 17 students and 18 researchers, representing all faculties at the university, and three library representatives. The sessions were carried out during six 2-hour sessions. By discussing their library and information needs, the participants provided the library with a large quantity of qualitative patron data that have up to now been lacking. All comments during the sessions were compiled in two separate reports and development strategies for the library's present and future services have already been defined and some also implemented.

The focus group method proved to be very successful in terms of encouraging library users to express their views on our current services. The discussions were lively and some of the findings quite surprising. Some of the contributions and feelings expressed could never have been caught through a statistical survey. The participants actually gave some very useful ideas for developing library services. The method also proved to be an effective marketing tool for the library and during the whole process the library has received positive feedback on its initiative. The library representatives agreed that the sessions had made them more fully aware of patrons' needs as well as had given them a deeper understanding of how to meet patrons' wishes. By sharing the findings with the whole of the library staff, a greater team spirit was developed and everyone felt engaged in developing the library's future services. A dialogue with our patrons has increasingly raised our motivation for further development in the right direction.

**Keywords:** Focus groups, Academic libraries, Students, Researchers, Library services, Qualitative methods

# Forging new alliances through LMS' (Learning Management Systems)

*Sigrid Gimse*

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## **Abstract:**

### **1. Introduction**

Instructions Librarians are always on the lookout for new ways to implement Information Literacy within courses.

One way is to work through the Learning Management System at your Institution (Black, 2008). This is what we have done at the Norwegian Business School in Oslo.

In the LMS we're able to market resources relevant to any given assignment or case, alongside with tips and tricks on how to use them. (Jackson, 2007)

In 2012 we've had a run-through of all the courses on the Bachelor level to see if there were any unmet needs in relation to cases or assignments given by the Faculty. This led to the identification of several possible courses.

### **2. Course content access**

Everyone can access a digital repository of former exam assignments on every course at our institution as soon as they are published to the students. We were basically interested in selecting those courses where the students were going to deliver a major assignment during the semester.

Held together with the course description it will provide you with enough information to form an opinion on whether the library should be present, in some form or other during the assignment period.

We then went on to analyze these assignments to find what we could supply them with.

We also had to see to that we didn't give them too much, i.e. we weren't supposed to solve the cases for them.

### **3. Results**

These efforts have been received exceedingly well by the Faculty when prompted for affirmation of our material.

This has extended the cooperation between instructions librarians and Faculty in new directions and into new courses and started up new alliances with members of Faculty with which there were no fruitful relations. Jones (2012)

We hope this can lead to better use of the Library resources and more engaged students and keep our Faculty interested and satisfied with the work we do.

We always need to strive to stay relevant and prove our worth, as we see ever stronger trends towards student self-sufficiency and Google dependency.

We would of course prefer to meet all our students face to face in class to teach them. This is often not possible due to shortage of time and capacity. (Stagg & Kimmins, 2012)

(Jensen, 2010)

This new way of connecting with the students can be a way to facilitate their way to information literacy, with reasonably small resources involved. (Jeffries, Peterson, Crowe, Fine, & Carrillo, 2011)

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## Formal ontologies and their role in the integration of library resources

*Ph. D. Jolanta Szulc*

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**Abstract:** The purpose of this article is to analyze and compare the resources including knowledge organization systems used in the Polish scientific libraries. The study was based on analysis of the systems available in the libraries of some universities in Poland and other scientific libraries. This paper presents the vocabulary control systems used in Polish academic libraries: subject heading language (KABA and MeSH), thesauri, classification and formal languages used to write these structures. In conclusion, the paper presents proposals for future research. The results of the study are addressed primarily to the specialist in the library and information science, librarians and professionals involved in the creation of the domain and developing a formal ontology.

**Keywords:** Subject heading language KABA, Subject heading language MeSH, Universal National Central Catalogue NUKAT, Mathematics Subject Classification (MSC), Library of Congress Classification (LCC), Universal Decimal Classification (UDC), thesaurus, classification, formal languages.

## Free and Open source Software for data analysis and interpretation

*Dr. Umesha Naik, Dr. D. Shivalingaiah*

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**Abstract:** Developments in the field of statistical data analysis often parallel or follow advancements in other fields to which statistical methods are fruitfully applied. When choosing an analytical tool to use, there are many factors to consider. This is useful in research, when communicating the results of experiments. Statistical models are currently used in various fields of business and science. However, the terminology differs from field to field. In this paper the authors highlight the varieties of data analysis software, its type, availability and for what purpose these tools are used. Because of its

empirical roots and its focus on applications, statistics is usually considered to be a distinct mathematical science rather than a branch of mathematics.

**Keywords:** Data interpretation, Data analysis, Data manipulation, Data measurement, Qualitative and quantitative data

## **From embedded to liaison librarian - promising new concepts?**

*Prof. Dr. Simone Fühles-Ubach*

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**Abstract:** In the last years the concept of „embedded librarians“ was much discussed and it was stated that a straight link of librarians to projects, committees and faculty work is a prerequisite for the integration of librarians in knowledge and information businesses of their responsible bodies. Since 2009 ARL has announced a secondary concept called „liaison librarian“. A special issue provided detailed information about the changes for librarians especially in the university and research libraries.

“Building relationships is becoming the essence .. - one that connects users with their information needs, ..”

The new concept aims at building individual relationships between librarians and customers and at creating electronic libraries according to customer needs. The university library of Christchurch, New Zealand, put this concept into practice after two massive earth quakes left the library badly damaged and no longer usable. The liaison librarians contact every professor at least once, in case of greater interest even twice a year, they gather the information needs via special interviews, give advice about the collection and talk about new acquisitions, which are mainly electronic media. Even after less than one year the concept meets the general approval of the customers.

The article discusses the change of the concepts from „embedded“ to „liaison librarian“ and its fields of activity. Furthermore the overall conditions and reasons for introducing this concept are presented. The main aspect is the „weakest“ link, the electronic collections, which remain invisible as library services without active marketing .

## **From hero to zero: an Information Literacy crash!**

*Lianda Coetzer, Hons BInf*

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**Abstract:** In March 1998 a new regulation in connection with the South African Qualification Authority (SAQA) was published in the Government Gazette, Act 58 of 1995. (South Africa, 1995) According to this Act, the Minister of Education declared that education in South Africa will in future be outcomes based. Education should ensure continuity of learning throughout life, shifting emphasis from the passive methods so widespread until now, to more active learning, including self-directed and independent study as well as tutorial methods.

The above mentioned was used as a starting point to develop an Information Literacy Module at the University of the Free State, South Africa, by the staff of the Library and Information Services. This module was ultimately accredited and was taught by a Training Librarian as a four credit module, compulsory for students in the Faculty of Health Sciences, Faculty of Law, Faculty of Humanities and the Faculty of Economic and Management Sciences. For 10 years the module was taught with great success, there was

clear evidence of the beneficent effect of the course and the paper will bring to the fore examples of the improvements discovered when the course was introduced. Although the course was not embedded within academic modules, but taught as a generic stand-alone course with scheduled periods on the time table. The Information Literacy course was, however, adapted to each Faculty to accommodate their specific needs regarding databases and referencing methods. Smooth sailing one would have thought, but the big crash was just around the corner! In February 2012 the news was announced that there will no longer be any Information Literacy training at the University of the Free State, South Africa! This after Professor Jonathan Jansen, current Vice Chancellor and Rector of the University of the Free State, emphasised that the quality of the student population is declining due to poor schooling and lack of access to resources such as libraries at school level. He strongly believes that the academic quality of students, researchers and academics must improve dramatically. The question is: how do students, who are already unfamiliar with libraries and research, learn to improve their research skills if there is no Information Literacy course being offered on campus? In this paper I will argue how the Information Literacy course was phased out due to re-curriculation that took place on the campus, the devastating effect it has on the Information Literacy levels of the students and that librarians must never fall into a comfort zone regarding Information Literacy as academics do not always see the importance of developing the Information Literacy levels of students. Lessons learnt will also be shared, as well as views for future enhancement.

**Keywords:** Information Literacy

## **Fundamentals of knowledge discovery in database and its application in Library and Information Centres**

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**Abstract:** Knowledge discovery is a very new concept of the field of Information and Communication Technology it describes the process of automatically searching large volumes of data for patterns that can be considered knowledge about the data. It is often described as deriving knowledge from the input data. The Knowledge Discovery categorized according to 1) what kind of data is searched; and 2) in what form is the result of the search represented. Knowledge discovery developed out of the Data mining domain, and is closely related to it both in terms of methodology and terminology the most well-known branch of data mining is knowledge discovery, also known as Knowledge Discovery in Databases (KDD). Knowledge Discovery creates abstractions of the input data. The knowledge obtained through the process may become additional data that can be used for further usage and discovery. Another promising application of knowledge discovery is in the area of software modernization which involves understanding existing software artifacts. Present paper attempts to highlights the

fundamentals of knowledge discovery and its application in library and information centres in the changing context of digital environment.

Knowledge Discovery is the non-trivial process of identifying valid, novel, potentially useful, and ultimately understandable patterns in data. With the emphasis on collecting data increasing around the world, there is an urgent need for a new generation of different techniques, methods and algorithms to assist researchers, analysts, decision makers and managers in extracting useful patterns from the rapidly growing volumes of data. These techniques and tools are the subject of the emerging field of knowledge discovery in databases (KDD). KDD has evolved from interaction and cooperation among such different fields as machine learning, pattern recognition, database, statistics, artificial Intelligence, knowledge representation, and knowledge acquisition for intelligent systems. The main idea in KDD is to discover a high level knowledge (abstract knowledge) from lower levels of relatively raw data, or to discover a higher level of interpretation and abstraction than those previously known. During the past 5 decades the notion of finding or discovering useful interesting patterns in data has been addressed by different research groups and researchers; we wish here to give a better idea of how KDD relates to these other approaches. Such approaches have been given different names, such as exploratory data analysis, information discovery, information harvesting, data archaeology, and data pattern recognition. KDD applies machine learning and pattern recognition techniques to extract patterns implicit in a database. The new wave of KDD addresses the overall process of discovering useful knowledge from data while data mining, statistic analysis and other such techniques address only a particular step in this process. KDD seeks incrementally to understand, to adapt and apply these patterns to future cases or data sets. KDD uses statistical methods, especially exploratory data analysis methods, but it sees their use as only one part of a more comprehensive knowledge discovery process. Statistical methods and algorithms offer precise methods for quantifying inherent inferential uncertainties. KDD systems embed particular statistical procedure for and modeling data, evaluating hypotheses and handling noise within an overall knowledge discovery framework. KDD approaches and methods are focused on model extraction or construction or discovery, rather than the parameter estimation of previously hypothesized models. They operate best in the context of large sets with rich data structures. For such large data sets, interpretations may already exist, coming from a special field of inquiry; by shifting the window of concern to another aspect of that data base, we may get some new pattern for another purpose.

In contrast with traditional data analysis, the KDD process is interactive and iterative. One has to make several decisions in the process of KDD.

## **The future of libraries**

*Alexandre Lavrenov*

Belarus

**Abstract:** Person receives empirical information through his senses from the outside world. On the basis of it he will build some model of the world in own head. The next piece of information from own senses allow person to check the adequacy of the constructed ideal model to the material world. It is can be considered as experience of this person. Analyzing the group of people and their combined experience, the latter is defined not only as the sum of the life experience of each member of the group. Due to the communication component in the form of speech, we have the rapid spread of the

particles of emerging new experience in group of people. This significantly speeds up the accumulation of new knowledge - we can speak about a synergistic effect here. However, the discussed group of people bounded by the joint activity has its structure of the organization. In particular, there are always the link, which is responding to the new problem by making decisions as an algorithm, building on the knowledge and skills of their specific group members.

In the process of evolution we add a new communication component in the form of writing. The transfer of experience through the generations in the form of legends, fairy tales, etc. carried too many inaccuracies or ambiguities. Writing allows to make this process more streamlined and formalized. In this case, appearing separate literary work can be considered akin to the personal experience of life, and the collection of such works, which takes place in libraries - as group experience. As before, it is necessary to have the link, which solves problems by means of the full information about each person and offers a sequence of actions. Now staff of library carry out this function.

Transformation of library resources in electronic form is the current stage of development of libraries or, in philosophical terms, representation of experience, knowledge of mankind. The logic of evolution or existing trends allow sufficiently clearly to outline the future of libraries and a program of action in this direction, and to assess its situation at present time. Thus, the above sentences claims the existence in the accumulation of new knowledge always at least such components as: 1) the selection or definition of a unit of knowledge, 2) compilation of the entire set of knowledge as a set of a unit of knowledge, and 3) the unique identification of each object or a unit of knowledge in a given set, 4) the selection or definition of the properties of each object, and 5) compilation of the entire set of properties as sets of analyzed properties 6) sampling, arranging objects according to certain properties. Introduction of ISSN and ISBN can be regarded as a specific implementation of the first three components. The realization of last components can be found, for example, as <http://www.worldcat.org/>.

To very clear and understandable of the current situation on the practical implementation of conceived one takes the easiest analogy to the Internet. It has a period of operating by numeric IP-addresses in own evolution, not by domain names. Presenting ISSN, ISBN as some abstract counterparts IP-addresses of some abstract virtual space, it becomes clear description of this stage of library services and the direction of their development. In this case, the transition to the analog of domain names in the library field means creating some friendly interface in standard client-reader requests. Therefore, all studies of interaction with the user on the Internet can and should be adapted to the library activities.

There is the reverse effect. If we consider the internet as a distributed system of uncontrolled spontaneous system to processing and storage of information, our abstract virtual space with the ISSN, ISBN as certain unique IP-addresses is controlled by definition. So it can be built according to certain semantic rules of Web 2.0-4.0. If in this area will be a good result, it can be carried on the Internet. Now all this is in its infancy and requires rapid progress.

Presenting numbering unit of knowledge or object as a specific entry in a certain database with fields as properties of this object, we can characterize the current state of library science as having a particular database in non-normalized form. At the end of this work also outline the priority areas of action for implementing the features of the future of libraries - 1) introduction ISSN, ISBN for all existing objects - in particular, created before entering the ISSN, ISBN 2) in database terminology it is necessary to normalize the available information - in particular, get rid of duplication and redundancy in representations of objects.

**Keywords:** Evolution, Library, ISSN, ISBN, Semantic rules, Web 2.0-4.0, Database terminology

# **Gaining the Information Literacy skills and the place of the school libraries in education**

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**Abstract:** While material production is essential in industrial society, “information“ is principal capital in information society. Information society is an active society aware of the importance of the information, cognisant from where and how to access the information, but able to use the accessed information effective and productive and caught the era. To succeed in the era we live in requires to be a good information consumer, acquires the ability to find the information and use it, in other words requires the possession of skill for information literacy (Kurbanoğlu and Akkoyunlu, 2002, p. 21). Well management of transition process to information society is directly proportionate to the importance given to the education by societies. Depending on this, in the educational and teaching institutions as the keystone of the formation of information society, raising individuals aware of information requirement, knowing when and where to access the information, using accessed information effective and productive, shortly raising individuals with information literacy, in other words, more importantly formation of information importance which is the essential element of information literacy should be provided. Doubtlessly, raising individuals with information literacy shall be possible by integrated relations of educational institutions with the knowledge centers. At every stage education and teaching complement each other with information centers.

However, it is considered that to acquire information literacy ability and get into the habit of using these skills in every stage of the life by the individuals may be ensured by acquiring and using those during at their young ages. In this sense, it is considered significant to give effort firstly in primary schools which is the first stage of education and teaching life on behalf of developing these abilities and to raise individuals with information literacy.

Responsibility to upskill these abilities for the students during primary school period are of the teachers together with school libraries and librarians. Inadequate utilisation of public libraries in our country, especially when young ages are considered, make the school libraries important for the students. Probably school libraries become the first place where the students meet with the libraries. In this sense, substantially responsibility providing favour and utilisation skills for libraries regarding the students belong to school libraries. Generally school libraries are defined as knowledge centers formed in every stage of the education; meeting the needs of teachers, students and other personnel on the issues such as literacy and reading, knowledge skill and independent learning and providing equal chances for everyone in relation with mentioned matters (Feather and Sturges, 2003, p. 567). In this context of description, school libraries also have functionalities as providing information literacy skills.

In this study we are going to handle what the information literacy skills are, information literacies scope, the aim and function of school libraries and responsibilities school libraries and librarians in addition to this the responsibilities of the school managers and the teachers in this aim.

Descriptive and documental analysis method will be used as methodology, local and foreign literature will be searched.

**Keywords:** Information Literacy, School libraries, Education

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## The genesis of TATA Central Archives

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**Abstract:** Tata Central Archives is one of the first business archive to be established in India. This paper gives a bird’s eye view on the genesis of the Tata Central Archive. It highlights the experience of the 140 year old Tata Group in starting its own archive. Going through this article I am sure that newer entrants who contemplate starting an archive will understand how difficult it is to start one in spite of best intentions. While attempting this it brings out the advantages of good record management in an organisation. The very fact that I am able to quote extensively in the following pages bears ample testimony to the importance given by the Tata management in preserving their Records for future.

In 1980 Mr. R.M. Lala, the famous journalist, suggested the idea of having a central archive of the group in view of the difficulties he faced while writing his book, “The Creation of Wealth: The Tata Story”. Mr. Lala, like several other Research Scholars before him found it deeply frustrating in accessing the companies records. However, the credit goes to him for his perseverance and determination in convincing JRD Tata yield to the establishment of an archive.

The project for setting up of the Tata Central Archives gathered momentum in 1989 — the 150<sup>th</sup> birth anniversary of Jamsetji Nusserwanji Tata, the founder of the House of

Tata. Mr. Lala, after years of frustration, raised the matter with JRD Tata, who jumped at the idea and said, *"I always wanted the archives, for when Tata Airlines was nationalised in 1953, Tata's lost all the records to the government."* Indeed, in 1932 JRD Tata did not realise that he was creating history as he passionately introduced and built an airline under the Tata banner. The creation and running of the airline was very dear to his heart and he never anticipated that a day would come when he will not be in a position to access his own records.

## **Go-to-Market initiative of Information Resources and Services: a special library-case-in-point**

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**Abstract:** ICT has a great ability to empower the user and enable them to create, disseminate and access to their own content/information. All this is possible because constant innovation by technologists. The innovation in Library and Information Sciences/services (LIS) helps the modern day librarian to respond to the ever changing needs of its clientele (library user). Innovation fuelled by marketing of the innovative information services and research information services plays a pivotal role in creating awareness among the library patrons thus better use of the library (subscribed) resources. This is leading to the multidimensional approach on part of library professionals in bridging the gap between library resources and users. Here is an effort undertaken by the authors to promote the library services/ resources through initiatives such as Go-To-Market (GTM) in a corporate software services company in Bangalore, India. The authors and their team have met many corporate users from all spheres and cadres in the software services organization to promote and create awareness among the users. The marketing methods used by the authors are innovative in their own way. The details are discussed in length, provided the specific graphs and also results in the article.

**Objective:** This case study paper outlines the development of the awareness through Go to Market (GTM) activity, to improve the usage of the resources subscribed and drive better employee satisfaction in the Wipro Technologies, Bangalore, India.

**Method:** The authors have worked as academic consultant and also employee with Wipro Technologies. The GTM was launched in March 2012. It encompasses an activity of the Information Services Division (ISD), Wipro Technologies, Bangalore, India consists of a large range of electronic resources and Research Information service, including market information supply, targeted information search and retrieval service, Supply of Company/market/industry/commodity profiles. The usage is constantly getting improved with every passing by month.

**Results:** A significant development in the usage has been observed (10-30% Month-on-Month). The usage of the ISD subscribed resources have shot up many folds. The Returns on Investment (ROI) presented to the management has resulted in getting the approval for the future budget requests. This also increased the confidence on part of management and in-turn boosted the confidence of the library staff.

**Conclusion:** Librarians are faced with many challenges such as resource crunch amidst of the rise in price of the library resources (Journals, eBooks and so on). Adding to this,



librarians are always need to provide the justification for all the spending (as most of the libraries are spenders than earners), this is more in software services industry. As the emphasis in software services organizations is more on applied research than pure research. Innovation is a buzz word in all the world industries (corporate world has moved one step further and made innovation as a mantra for gaining competitive advantage and success). So, modern day library and librarianship has to embrace this innovation mantra to serve their clientele and be successful in all their endeavors.

**Keywords:** Go-to-Market, Information resources and Services, ROI, Innovation and Special Library case study

## **The hand-held library: basics of creating mobile library websites**

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**Abstract:** Mobile communication technology and its rapid advancement have made great strides in the academic and learning environment. There is no doubt that the libraries are also carrying on the mobile advancements into its library services. Today's information society seems to be living in a world where the offer to provide the library in their handheld devices is not only a dream but a reality. Though libraries are perceived to be the sanctum sanctorum of man's quest for Information, where humanity has traditionally journeyed to quench their thirst for knowledge, today's users expect the library be taken to their hands. This paper looks at the overall impact of mobile services and applications in libraries and looks at the specific area of building effective mobile library websites. Library websites being the face of any library, the basics of creating a mobile ready website becomes a necessity to be observed for libraries which care to take their library services to the mobile users. This paper looks at various steps in creating mobile ready website, starting with planning and choosing to testing and validating of mobile websites.

## **Harmonizing information users' readiness with the digital information environment**

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**Abstract:** The study investigated the extent to which information users were managing to harmonize with the digital information environment. A questionnaire was distributed to 237 students from high schools in Muscat District, Oman. SPSS was used to analyze the questionnaire responses. The study showed that Students have favorable attitudes towards the use of ICT for general purposes and social communication. However, they need to be directed towards better investment of their IT skills. Thus, they would not be addicted to the use of the Internet for only social purposes, but would also correlate their

readiness with the continuously changeable digital information environment. Needless to say more behavioral and systematic orientation is required.

**Keywords:** Students, Users, Harmonization, Readiness, Characteristics, Digital information environment, Oman

## **Have library symbols been changed by cultural differences? A study of the example of the watchwords and logos of libraries**

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**Abstract:** This speech analyses some visual artifacts which are use by libraries. Due to the spaciousness of the topic they focused on two of the main and popular artifacts: the watchwords and the logos of libraries from two cultural areas, the first area of several countries connected with Islam and/or Arabic culture and being under the influence of such traditions. Among described institutions are libraries from e.g.: Turkey, Kuwait, Malaysia and/or Kazakhstan. Second area are countries that belonged to the Soviet sector of domination, such as: Poland, Lithuania or Ukraine. The mentioned countries are entirely different from historical, cultural and the political point of view. But now all of them are similar in common questions/developments: dynamic building or rebuilding economical consequence. One of the important instruments to gain this is good marketing the marketing of cultural artifacts including libraries and/or other information centers. This instrument shows a long and rich history and tradition in those countries. Comparing and finding some parallel points among these countries related to marketing and the socialization of information are main aims of this speech. In this work watchwords and logos of libraries will be explained and mentioned to compare information services, marketing library services and planning them, and will also mention the cultural differences of marketing library services among two separate cultures. Authors of this study used two scientific approaches: semiotics and diachronic method.

**Keywords:** Cultural differences, Library logos, Library watchwords, Semiotics and diachronic methods, Marketing library services

## **Heart to Change? - a study on change management in five Swedish libraries**

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**Abstract:** Heart to Change is a project in which organizational, planned change is explored and described from a library perspective. The aim of the study is to find key factors for successful change management in libraries.

Five Swedish libraries (two public libraries and three academic libraries) with experience of successful changes were selected. Interviews were conducted with 19 people who were either change managers or employee representatives. Theories of change have been studied for analysis and understanding of the changes that were studied and for identification of different change strategies that are possible and in some cases the most appropriate. The best way to manage a change depends on the kind of change, situation and context. Various conditions that affect a change implementation are described. Emphasized conclusions are particularly the emotional aspects of change management, the importance of planned communication and the impact of time and timing. The transition from episodic to continuous change and what it means for the organization is also discussed. The findings could support change managers to work more consciously with planned change in libraries. The project was partially funded by the National Library of Sweden.

**Keywords:** Change management, Library change, Organizational change

## **Health Information Quality Management System: academics health libraries perspectives**

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**Abstract:** This paper treats about health information quality in health academic libraries in Brazil and Germany. It analyzes the Health Information Management linked to Health Information Quality for educational and research purposes. Through qualitative and quantitative research, data were collected from literature review and empirical surveys applied in health academic libraries. It was adopted the method known as 'Information System on Quality'. The objective is to design a model of information quality management for health academic libraries. As a main result it identified that the quality management model adopted by academic libraries offer different information quality perceptions by professionals and library's users. It concludes that quality standards are possible to be adopted by any academic health library.

**Keywords:** Academic health Library, Information quality, Health information quality, Quality management, Management of Health Information Quality

## **Health information services and the changing paradigm of information science**

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**Abstract:** The Portuguese health system, as many other European health systems, is at the moment passing through the reorganization of their structure and through the redefinition of the work processes, with a view to improving all aspects of the health sector. We find that the area of information services, traditionally divided into archives and libraries, has been away from issues on which attention has been concentrated.

In the present work, developed within the disciplinary field of information science, we present what some contemporaneous authors define as the new paradigm of information science, called as post-custodial and informational paradigm, which conveys a holistic view of information and has a direct effect on the organization of services.

Taking this paradigm as the theoretical-epistemological reference of our work, we present an overview of the European scene of health information services and we show the major conclusions of the study of the information services in the hospitals of the Portuguese National Health Service, conducted in the past five years in order to know their organization and operation. Starting from the findings obtained in this study, we propose a model for the (re)organization of information services in the hospital context, considering the integrated, systemic and dynamic vision of the information.

**Keywords:** Information services, Health information, Archives, Libraries

## **How the library can collaborate with researchers? New roles for new needs – A case study of the Catholic University of Portugal**

*Maria João Pinto and Sofia Fernandes*

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**Abstract:** This study aims to present new projects and developments made by the Library and Information Management of the Catholic University of Portugal, Regional Center of Porto, in the promotion of research and knowledge.

We've presented at QQML 2011 a case study of our ongoing projects then: Bibliometric studies and research, Open Access initiatives, Institutional Repository and the collaboration in the creation and publishing an open access e-journal.

Now, we want to show you our developments at those projects: what we've succeeded, what our difficulties were and what we have really achieved. We also present the next steps in those projects: our goals and activities.

The main news in Bibliometric Studies is the collaboration with an Arts research group with regard to helping the visibility and the evaluation of its scientific production. We will explain our goals.

On the other hand, through 2012, besides working on those projects, we've also embraced others because some were very related to the projects we've held and others we saw the need and the opportunity to create value with regard to our teaching and research community.

The Library and Information Management aims to pursue strategic activities to support the university and our community.

One of the major projects is the creation of a new service at our Library: Visibility and Impact of Scientific Journals published by our university. Its purpose is to identify and implement, in collaboration with our journals publishing faculties, quality and formal criteria in order to be submitted and indexed at major platforms. This is a strategic action

to promote our knowledge by becoming more accessible and reach more authors and readers, mainly internationally.

The second project that we are developing concerns the planning of a curricular integration of Information Literacy with themes about electronic resources, search and retrieve of information, research and publishing.

Its major purpose relates to the specific demonstration of how the skills of Information can be exploited and profited for collaboration in the organization's mission through a study case.

**Keywords:** Information skill, Library's new roles, Scientific Impact, Journals, Strategic activities

## **ICT: learning growth in Ethiopia**

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**Abstract:** Among the developed nations the development and application of ICT solutions is growing at a rate never seen before. Saying it is in its infancy does not begin to summarize the case in Ethiopia. Not only is its application at the starting point, but the major players in the industry - suppliers, end users, consultants and donor organizations are also contributing to this sluggish growth rate.

This paper discusses the causes of this slow pace, and reviews the current practices of the major players in this sector. It stresses the undoubted need for a paradigm change in the way these players perceive competition and the growth of strong co-operation between them, if we are to see a meaningful change in the current status of ICT application in learning in Ethiopia.

## **ICT aptitude of LIS first year students: a comparison of two library schools of Punjab**

*Muhammad Umar Farooq*

Assistant Director Library, Higher Education Commission, Pakistan

**Abstract:**

**Purpose** – Main objective of this study was to evaluate ICT aptitude of the students getting admission to MLIS program of two different schools of Punjab province.

**Design/methodology/approach** – This study was implemented through a descriptive survey. Data was collected from 110 (first semester) students of LIS school of University of the Punjab and Islamia University of the Bahawalpur through self-designed structured questionnaire with both open and closed ended questions. Apart from questionnaires, in-depth interviews with the teacher of both LIS schools were also conducted because it was felt that this research is dealing with ICT technical knowledge of first year students and they might not be able to uncover hidden areas and concerned issues. Data were analyzed and presented by means of simple descriptive statistics.

**Findings** – ICT skills are considered essential for any librarian of modern age. LIS schools of Pakistan have included a number of computer related courses in curriculum to ensure ICT knowledge of students. Unfortunately, the stuff coming to MLIS program is usually without any background of ICT knowledge. Results of this study show that the students have poor ICT aptitude and usually have no computer usage training. ICT skills are divided into three categories i.e. computer, internet and mobile use. Students evaluate their personal ICT skills and it was found that they even lack in basic knowledge. Interviews of teachers also highlight the poor ICT aptitude of students and the problems they faced in teaching and excelling them.

**Research implications** – This study is helpful for the LIS schools to set their ICT related course contents and teaching methodologies. The results of the study are generalizable in Pakistani context as well as in development countries of similar conditions. As most of the time the nature and aptitude of the students coming to LIS programs is same.

**Originality and value** – This paper provide insight to the level of ICT skills possessed by the students joining LIS profession and the challenges cast upon the LIS schools' faculty to answer the demand of LIS market. This study is original in nature as no such study ever conducted on national or international level.

**Keywords:** ICT aptitude, Internet, Computer, Mobile, LIS first year students, Pakistan

## **Identifying patterns of scientific production in universities and research centers in Mexico**

***Javier Tarango, Laura-Patricia Murguía-Jáquez, José R. Romo-  
González and Gerardo Ascencio-Baca***

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**Abstract:** It presents the results of a study that identifies a simplified theoretical model on the evaluation parameters of the scientific production in Mexico in universities, both public and private (whose action is primary education) and research centers (focused on the generation of knowledge), the application allowed to develop an analysis of production levels (quantitative evaluation), quality and innovation (qualitative evaluation).

The main findings focus on identifying patterns of behavior, strengths and weaknesses of scientific production between both types of entities, taking into consideration that although the purposes and priorities are different the forms of assessment are similar. Finally, the study details a set of guidelines to be considered in the institutions of higher education and research centers in Mexico, involving the establishment of systematic models of evaluation of scientific production that allow regular assessment, institutional and disciplinary, comparing results in these entities.

## **Impact of Information Literacy program on knowledge structure of Information Literacy**

## ***Szu-chia S. Lo***

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**Abstract:** “Information Literacy” has been an essential topic of much interest both nationally and internationally. Being information literate is crucial for citizens in information age. Information literacy has been seen as one of the important factors of improving students’ learning outcomes. This has been especially significant since the rise of the Internet. As we rely on more and more information in the electronic environment, we need appropriate information and technology expertise and instruction. The aim of this study is to reveal the impact of a two-credit information literacy program on college students’ knowledge structure of information literacy. The goal of the two-credit course on information literacy is to have the students who attend this course become information literate, will be able to recognize the information needs, identify suitable sources, retrieve information in an efficient way, select and use information in a proper manner. This paper reports students’ learning outcomes of the two-credit program.

The two-credit program was designed based on Information Literacy Competency Standards for Higher Education from the Association of College and Research Libraries, American Library Association and is offered as a course for general education. The author took qualitative approach and conducted the research in a class context. During the 18-week semester, pre-class worksheets, in-class exercises, assignments, term paper and exam were used to assess learning outcomes and papers produced from those tasks were collected for content analysis to learn how knowledge structure changed during the learning process. Unstructured interviews and observations were also carried out throughout the semester. A post-class survey was given to gain the feedback from the students.

Twenty one students including international students attended the course. The preliminary results show that even the students were experienced with Internet surfing but lack of knowledge of identifying proper information resources and different types of materials, how to construct search strategies and evaluate information before taking the course. The students started to construct the knowledge regarding information literacy gradually during the semester, more progress was observed when the students did not only exercise the competency in the class but also in other courses, prior and more experience in information search and use had positive impact on learning outcome. Enduring impact has not been observed when the paper is drafted.

**Keywords:** Information Literacy, Knowledge structure

## **Impact of library image, perceived value and experience on user’s behavior intention**

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**Abstract:** It is important to learn what factors attract our users visit library and access information services to increase the use and impact of library. This study adopted the marketing ideas, include store image, perceived value and customer experience, to identify the factors that attract users visit public libraries and utilize library services, and how the factors will influence users' behavior.

In this study, the authors transformed the concepts of store image to library image, perceived value to library value, and customer experience to users' experience. The aim of this research is to examine how library image, library value and customer experience would influence users' behavior, users' intention to continue using library services, and the possibility of recommending the services to others.

The authors took survey approach. Questionnaire and interview were applied for data collection. The authors surveyed the users visited the sampled libraries located in Taichung, Taiwan, during the period of April and May 2012. 366 questionnaires were sent out and 4 in-depth interviews were conducted. Statistical techniques, such as Descriptive Statistics, Chronbach's  $\alpha$ , One Way Anova, Correlation Analysis and Regression Analysis were adopted for data analysis.

The results show that library image was build upon library value and users' experience, it means the users believe library could provide ingredient that could improve their lives and the past experience would affect how users portrait library. With three factors correlate with each other, the users value library services and will continue to use library resources as well as recommend library services to others, especially when the users have positive image towards library services. For the sampled public libraries, services quality, library services and library location are the three factors have major impact on library image. Facilities, easiness to access library services, and library setting are the candidate targets for library strategic plan.

**Keyword:** Library image, Perceived value, User's experience, User's behavior intention

## **The impact of library performance on students' satisfaction**

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**Abstract:** This paper aims to assess undergraduate students' satisfaction within the Arab International University (AIU). The results were addressed by conducting a questionnaire to a total of 228 of the undergraduate students of AIU, and by undertaken 8 interviews with the librarians involved to understand users' expectations and requirements of the AIU. The findings showed: a) a statistical significance of students' ability to find and use the information; b) a relationship between students' expectations and received materials; c) students were satisfied with library services' quality in terms of accessibility; d) a relationship between providing the newest and valuable collections and students' satisfaction; e) the most difficulties facing students were a lack of time and the ability to visit libraries; and f) the main services for students were borrowing books and references services. Furthermore, the findings illustrate statistically important differentiations on the satisfaction level on library collections between participants and faculties. A statistical significance between students' profiles and their satisfactions was indicated in terms of selecting the information resources.

**Keywords:** ArabInternationalUniversity (AIU), Learning environment, Library service quality, Students' satisfaction and expectations



## **Impact of Pakistani authors: a study of Library and Information Science Faculty**

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**Abstract:** The ranking of universities and journals have been the focus of the scholarly community. These rankings are used as a marketing tool for attracting new comers to the universities and for authors to the journals. As a consequence, ranking of authors/faculty in a field of study has also become popular which can be used as a useful tool for awards, promotions, recruitment, recognition, etc. Citations to scholarly writings have been used to develop a number of quantitative measures to determine their impact on the literature of a topic. This paper investigated the impact of 53 LIS faculty from eight Pakistani universities. The data were collected during July 2011 using Google Scholar database. Only 11 out of 53 faculty members contributed 118 publications which received 536 citations. H-index, G-index, HC-index, HI-norm, AW-index, E-index, and HM-index were used to determine the impact of these authors. The most cited publication of each author was identified and the scatter of their publications in various journals was determined. The number of faculty members who received citations is small and their scores in various indices are generally low. There is a need for these faculty members to publish in impact factor journals in order to get more citations and higher scores.

## **The impact of the Online Knowledge Library: its use and impact on the production of the Portuguese academic and scientific community (2000-2010)**

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**Abstract:** In recent years several initiatives have taken place to promote universal access to the Information and Knowledge Society. It was in this context that in 2004 the Online Knowledge Library (b-on) was launched in Portugal. With it, it became easier to get access to full text international scientific publications. This study aims to present and analyse some of the statistical and bibliometric indicators of the Portuguese scientific output seeking to evaluate its link it with b-on. It was analysed the usage of b-on resources by the public universities members of the consortium from 2004 to 2010, and we chose as sample the five universities with more downloads per FTE (full time equivalent). In addition to the usage data of the consortium, we used the Web of Science (WoS) from which we identified the articles indexed by the five Portuguese universities affiliated between 2000-2010. Thus, and through a quantitative methodology, we identified the scientific production per subject area, international cooperation and scientific journals with the highest number of published articles, among others. We conclude that the availability and access to electronic resources contributes to the increased of the scientific productivity of the universities and that the study and analysis of its use and output are essential.

**Keywords:** Online Knowledge Library, Electronic resources, Bibliometry, Scientific Production, Portugal

## **Impact versus usage metrics: their meaning, characteristics and challenges for modern libraries**

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**Abstract:** According to the transition from print journals to electronic (hybrid) journals in the past decade, usage metrics have become an interesting complement to citation metrics for periodicals and consequently a hot topic for the scientometric community. Furthermore the role of monographs in Social Sciences and particularly in the Arts & Humanities as the main channel in scholarly communication is undisputed. It therefore not only deserves closer attention but also demands the development of appropriate metrics. The launch of the Book Citation Index by Thomson Reuters is a first response to tackle this issue. While electronic journals have been widely embraced within the last decade, the usage of electronic books is still lagging behind. Currently the future of e-books as well as of traditional printed monographs is heavily debated and remains uncertain.

In this study citation and usage metrics for both channels of scholarly communication, namely periodicals and monographs are reviewed.

For periodicals, our work is based on global usage data from Science-Direct and citation data from Scopus, both provided by Elsevier. For monographs, we rely on loan statistics provided by the University of Granada and the University of Vienna and retrieved citation counts from Web of Science, using the Cited Reference Search, and from Google-Scholar, using Harzing's "Publish or Perish" tool.

Main goals of our study are:

- to discuss the meaning of the most important impact and usage metrics, shedding light on both their strengths and weaknesses and pointing out what they actually measure. The focus is laid on citations, downloads and library loans.
- to investigate the similarities of and differences between usage and citation behaviours for periodicals in several disciplines across natural sciences, medicine, social sciences and humanities, and to challenge and rebuild the current metrics for periodicals, which are based on impact and usage factor
- to compare loans and citations of monographs and to analyse the potential of library loan statistics to serve as an adequate proxy to measure the usage of monographs. The latter could even be used as an applicable selection criterion for the inclusion of monographs in book citation indexes.
- to identify arising issues and how these could be addressed by modern libraries in order to underpin their expertise and importance to actively contribute to the reorganization of scholarly communication

Challenging future tasks for academic libraries are the enhancement of current usage and loan statistics as well as the promotion of platforms and other initiatives, which aim to provide richer and more comprehensible usage data for both journals and monographs. Such enhanced data then allow the construction of more sophisticated metrics.

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## Implementing critical thinking in cross disciplinary programs: a framework for global literacy

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**Abstract:** The globalization of the Internet has driven critical thinking beyond the realm of libraries, classrooms and boardrooms. Global literacy is needed now more than ever before if the complex problems of humanity are to be solved in a reasoned and rational way. In order to enable students to reach their full potential in increasingly complex environments, a literacy model that can adapt both to the curriculum and to the boardroom environment is evident. A model program that has its genesis in the Writing/Composition/Research curriculum at the University of Maryland informs critical thinking by engaging the components of information literacy as a vehicle that encourages problem solving and conflict resolution. Students select one of three basic themes that ask questions about how online technologies are changing the way we live, what it means to be human, or what role technology should play in a specific area. Increasingly complex research projects that examine both domestic and international debatable research in manageable frameworks are developed over the length of the course by students. The research design of a topic is developed by analyzing and synthesizing communications, interviews and studies of complex issues while immersed in a seemingly borderless information environment. Because this model is broad, it is easily

adaptable to topics ranging from financial literacy to military literacy. As librarians, skilled in retrieving, managing and organizing information, we can move beyond the borders of library literacy to join in collaborative pedagogical efforts to teach critical thinking and information literacy across the curriculum.

## **Implementing innovation management in the librarians' education**

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**Abstract:** In this paper we reflect on implementing innovation in Library and Information Science education in Borås, Sweden. In our role as lecturers we meet students and through them shape the presence and the future of libraries. Also we aim to match the needs of society in times of change. The main method for higher education is the courses we create and the educational methods we choose. Often the importance of this is forgotten. This paper presents a course called “Project management, development and evaluation”. In this course we try to give students some new tools for managing creativity and innovation in their future librarianship.

**Keywords:** Innovation, Youth, Drivhuset, Creativity, Leadership, Library and Information Science education, Libraries

## **The implementation of an internal evaluation model in a special library. The case study of BPI Library**

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**Abstract:** The Library of the Benaki Phytopathological Institute (BPI) has been in operation since 1930. It is a special Library dedicated to the subject of agriculture. In particular, it covers subjects of phytopathology, plant protection, plant health, botany, entomology, agricultural zoology, weed science, phytopharmacy, pesticides control, ecotoxicology, environmental protection, crops, food technology, food quality and integrated management systems of rural production, intended to support and enhance the research activities of the BPI community members and external users too.

But, does –really– the BPI Library achieve its purposes? Are users needs satisfied? Are users expectations exceeded? What is the effectiveness, the efficiency and the quality of the provided services? How does it collect and report its statistics? Aiming at achieving its purposes, and especially, intending to satisfy users needs and expectations, the BPI Library has realized that the implementation of an internal evaluation model was needed. Indeed, since January 2012, an internal evaluation model has been planned and

implemented according to the International Standard BS EN ISO 2789:2003 (Information and Documentation-International Library Statistics), the ISO 11620:1998/Amd.1:2003 (Information and Documentation-Library Performance Indicators) and the PD ISO/TR20983:2003 (Information and Documentation-Performance Indicators for Electronic Library Services). According to this model, there are almost 100 indicators grouped in seven (7) basic categories. Each category is symbolized by the first letter of its name. (C= Collection, P= Procedures- Processes, U= Library Usage and Users, E= Equipment – Infrastructure, S= Staff, E= Expenditure, O= Objectives). Each category is divided in one or more sub-categories. Also, each indicator is symbolized by the first letter of its category in combination with a numeral system. (The indicator “P1.1.1” means Procedures – Cataloguing – Books, while the indicator “P1.1.2” means Procedures- Cataloguing – journals). All the indicators are presented in a table, which is used as a “tool”. The table consists of 5 columns: 1. Indicator Code, 2. Indicator Name, 3. Indicator Abbreviation, 4. Description and 5. Data Collecting & Counting Way. Additionally, several forms related to indicators are used in order the whole procedure of the evaluation be documented. The appropriate use and exploitation of the above described model – according to the experience having been acquired by using it – can lead certainly to faithful conclusions concerning the internal evaluation of a Library.

**Keywords:** Internal evaluation, Quality, ISO standards, Indicators, Special libraries, Research institutes

## **Implications of library state laws on information services in public libraries**

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**Abstract:** The National Network of Public Libraries (RNBP, for its abbreviation in Spanish) was established in 1983 and the General Law of Libraries was published in 1988. This law is of national observance. It indicates the tasks and obligations that each level of government (federal, state, and municipal) has regarding the establishment of public libraries, as well as the general principles for network operation.

During the first decade of RNBP existence, library infrastructure (buildings) has increased notably, from 351 in 1983 to 5,120 libraries in 1994.

Later on, actions centered on library services and maintenance were taken in the second decade. Likewise, financial mechanisms were promoted and created for the rehabilitation and improvement of present public libraries. Respecting the collections, they did not have a proportional increase compared to the number of libraries.

In 1985, the General Regulation of Library Services is created, and modified in 2001. This modification establishes librarian functions, building installations *ex profeso* for libraries, as well as its adaptation for handicapped people. Digital services are also mentioned.

The first state to elaborate its own library law was Puebla in 1978. However, some states of Mexico begin the task of developing their own library laws until 2001. Currently, 10 states have their own law.

Thus, the importance of the following, knowing about services offered by the libraries and their situation in states with their own law; realizing if the situation before having their own law changed or remained the same; and understanding library state laws, to verify if they are a copy of the General Law of Libraries or they have been adapted to the local context of each state.

Qualitative and quantitative methods will be applied to answer these unknown issues. A qualitative review of law contents will be performed, and the number of libraries will be quantified in each network of state libraries with their own law. Besides, a questionnaire will be applied to the coordinators of state networks, chosen for obtaining the elements that will allow us an overview of the libraries from states with their own law, and the services offered by them to their communities.

## **Incorporating archives-based research into the curriculum: a collaborative and outcomes-based approach**

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**Abstract:** In the last decade Special Collections and Archives at academic institutions have received a great deal of attention. Special Collections have become the area where academic libraries can distinguish themselves based on their unique holdings. Leveraging the importance of the archive's holdings can bring about a multitude of benefits ranging from increased student engagement, to better student learning, to donors funding research awards.

At the University of Arizona Libraries (UAL) Special Collections, innovative approaches to instruction are taking place that go far beyond the classroom. In collaboration with several faculty over several years, Special Collections staff at the UAL have used the instruction experience to forge relationships with departments from Journalism, to History, to English. Working collaboratively to develop outcomes for student learning, faculty and librarians have had repeated success with familiarizing students with primary source material, incorporating archives into their research and further developing a deep understanding of the role archives play in our lives and the importance of these for our historical record. At the UAL, students have taken what they have learned from their Special Collections instructional experiences and showcased their learning to the campus in a variety of ways, from panel discussions to documentaries. The results of which include inspiring donors to develop endowments to further student research in the archive.

In this presentation, Verónica Reyes-Escudero will discuss ways in which Special Collections librarians and archivists are uniquely positioned to form collaborations across campus to provide rich and engaging student learning experiences. She will further discuss practical ways in which teaching with primary sources can provide avenues for outcomes-based learning as well as how instruction can be taken beyond the classroom to showcase student learning to campus constituencies and donors.

## **Individual project options in Human Resources Management/HRM module: a case of Digital Library Learning /DILL Master Programme**

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**Abstract:** The Human Resource Management/HRM aims to increase organizational effectiveness and capability – the capacity of an organization to achieve its goals by making the best use of the resources available to it. There are no universal characteristics of HRM. Many models exist, and practices within different organizations are diverse, often only corresponding to the conceptual version of HRM in a few respects. In Oxford Handbook of Human Resource Management Boxall *et al* (2007) remarked that: “Human resource management covers a vast array of activities and shows a huge range of variations across occupations, organizational levels, business units, firms, industries and societies.” (Oxford Handbook of Human Resource Management, 2007, p. 39).

The HRM module is designed for Erasmus Mundus International Master program in Digital Library Learning students to develop knowledge and understanding on HRM theories, practices, tools and models and to provide students analytical framework needed to understand strategic HRM approach in digital libraries. According to learning outcomes with successful completion of this module students have depth and systematic knowledge and clear understanding of the nature and value, current practice and research on library HRM in the digital environment, acquired knowledge and understanding on concepts of HRM and their applications in digital environment, will be aware of the range of issues and international trends of library HRM in digital environment.

This module consists of twelve topics where the overall purpose of HRM - to ensure that the organization is able to achieve success through people – discussed on the society, organizational and personal levels. Each topic contains within it a number of activities for learners to undertake - for example, short/weekly assignments and weekly discussions in the classroom. The module contains collaborative group project and an individual assignment/individual module project. The purpose of the individual module project is to synthesize what student has learned about HRM and how to implement HRM topics in digital library context. The result of the individual module project is an academic essay written by student's preferred topic.

This paper discusses and summarises the students individual project options in HRM module based on content analysis of students academic essays of last five years. The main purpose of the paper is to analyse student's interests to the different topic of the HRM module, compare different HRM theories and models used by students and framework associated to understand HRM issues within the digital library or library in the digital environment.

**Keywords:** Human Resources Management, Erasmus Mundus International Master Program Digital Library Learning, Academic essay, Content analysis

## **Indicator for quality of services in digital library services**

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**Abstract:** Development in information and network technologies has increased access to timely, current and relevant information at unprecedented speed. It has also transformed the conventional library services into third-party sourced services such as digital and electronic services. Unfortunately, this change has brought with it stringent quality of

service demand from the library patrons. However, there exist little research on quality of service (QoS) provisioning for library services that are sourced from third-party service providers. This paper aims to address this gap. Specifically, we will identify the need to evaluate QoS for externally sourced services such as digital and electronic services in library. We will propose a framework with performance features and quality indicator to meet the QoS assessment of sourced library services. We validate the framework with data collected from 150 librarians.

## **Indicators for journal management: a deficit analysis**

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**Abstract:** In 1913 Charles Fisher, librarian at the College of Physicians in Philadelphia, USA, already stated: “Requests are made daily to libraries for periodicals, [...] even if Library can afford the subscription; the particular journal may be asked for once and the title not again heard mentioned for years.” Since then the internet, copiers, eJournals and the Journal Impact factor (JIF) have been invited. Nevertheless journal selection is a constant challenge for Academic libraries, due to limited budgets and the unpredictability of user needs. In contrast to Fisher’s situation, users now expect every article to be delivered to their work place with one click. The results of surveys in libraries worldwide show that most decisions in journal management are made based on usage statistics in combination with prices. In some cases libraries are also using data from user surveys, publication habits or journal rankings (JIF, Altmetrics etc.).

This study gives an overview about all measures and methods with their strength and weaknesses used for journal management in Academic libraries. The first step is an analysis of functions, actors and general conditions of journals. Furthermore the different methods are reviewed and analysed specifically looking at formal and content issues. Every method is described with its possibilities for interpretation in relation to the amount of effort spent. This includes the framework and conditions of decision processes for journal licenses in libraries with a focus on eJournals.

Concluding “Data Envelopment Analysis (DEA)”, which was developed for measuring of production efficiency, will be presented. Up to now DEA was used in library context only in a few studies to compare different institutions. The intention is to show, that DEA is able to reduce the effects of deficits from the methods and measures used and that DEA is not just useful but necessary for a collection management that really meets user needs in libraries.

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## **Informing policy and practice through assessment of new library books’ usage at Makerere University**

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**Abstract:** MakerereUniversity Library (Maklib) procured over 10,000 latest editions of textbooks with funding from Carnegie Corporation of New York (CCNY). The books were selected by lecturers from all academic departments. Prior to the selection, lecturers were trained in modern book selection methods to ensure that they made appropriate selections and updated the reading lists. Once received, the bibliographic records of new books were entered in the Virtua Integrated Library System. After one year, Maklib conducted a study to find out whether the new books were being used, how relevant the books were to users' needs, whether the reading lists were current, whether user education, library catalogues, etc. had any influence on the usage of new books. Data was collected using a short questionnaire that had ten questions, two of which were open ended. The first set of data was collected for two weeks during the peak period (11<sup>th</sup> and 12<sup>th</sup> week of the semester) and using the Virtua Library System circulation module. The second set of data was collected during the 5<sup>th</sup> and 7<sup>th</sup> weeks of the semester and using the self-administered questionnaire and the circulation module. The quantifiable data was analysed using Google spreadsheets, while the qualitative data was grouped into themes and categories. The findings indicated that the books were overwhelmingly relevant; most reading lists had most of the new books confirming that they had been updated and hence the book selection training was timely. User education and other information literacy training contributed to raising awareness about the new books. The paper concludes by highlighting lessons learnt, their implications for policy and practice and identifying emerging areas in library services at Maklib that require further research.

**Keywords:** Library books' usage, Library policy, Collection Development, Library usage, Library circulation, MakerereUniversity, Maklib

## **Information extraction for technology opportunitydiscovery**

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**Abstract:** Information extraction from text data, such as academic papers and patents, has been a great research challenge in the areas of knowledge discovery and information analysis. In this paper, an information extraction model, based on the machine learning technique and graph-data mining technique is proposed. The linguistic features of text are learned from expert-classified training data for technical named entity discovery, and the relations between technical named-entities are discovered from the dependency graph generated by the Stanford dependency parser using the graphed-data mining technique. The purpose of this model is to extract technical information, such as name of technology, purpose of technology, application of technology, name of product and part, relation between products, relations between parts of products, and so on from papers and US patents. This model is originally designed to support our technology opportunity discovery (TOD) service for small and medium enterprises, and we believe this model can be applicable to any general information service based on text data analysis.

**Keywords:** Digital library, Machine learning, Linguistic feature, Technological

information detection, Technology opportunity detection, Natural language processing, US Patent

## Information for innovation

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**Abstract:** Information for innovation is the name of a project that was put into practice by the Slovak National Library in Martin in 2008. Its target was creating a network with informational connection of scientific, academic and specialised libraries including their modernisation and thus create an easier access to information and help the innovation in all fields of economy and industry in Slovakia. This project was financed from the EUB's structural funds. Now, it has been the fifth year when users have the opportunity to utilize the access to the electronic information sources within the project's framework.

The availability of scientific, technical and economical information is a necessary precondition of increasing the competitiveness of Slovak subjects and educatedness of users. The electronic information sources for the project were purchased as a permanent purchase for the libraries. It is a license that allows the libraries that participate in the project (together 11 Slovak academic and scientific libraries) to utilize these sources for unconditionally long period of time on the basis of agreed licence rules. Registered users are allowed to access the databases of individual electronic information sources via remote access on the basis of technical solution, provided by the Slovak National Library via system NAVIGA.

Important, measurable indicators of the project are: a number of registered users, provided information and consultation, a number of provided services, attendance of web pages, and a number of expert researches. The Slovak National Library in Martin is nowadays not only a library but also a modern information centre. More and more people are becoming patrons of the Slovak National Library each year. The library provides its patrons with not only an easy and comfortable access to online catalogues from its stocks but also allows them to access online databases including full-text, expert scientific articles and e-books.

**Keywords:** Project Information for innovation, The Slovak National Library, Users, Librarian services, Remote access, Electronic information resources, Measurable indicators

## In the information flow at two Sapienza libraries

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**Abstract:** 21st century librarians handle a wide array of technology and social tools many of which were not even around five years ago. These have had a profound transformation in how academic communities create, disseminate, preserve, and use information and knowledge. Libraries have had to redefine their portfolio and offer distinctive and revitalised services to ensure a presence into the future reshaped around our users needs.

Thanks to changes in the traditional print-on-paper publishing chain new opportunities have opened up for the academic library to add significant value and forge greater engagement with all the members of the community. Two pilot projects are underway at the Engineering and Architecture Faculties of Sapienza, University of Rome, to identify areas where new digital tools, such as online publication of local content, can place the library into the digital flow of research and scholarly communication.

**Environmental Scan:** Prior to undertaking the pilot a comprehensive environmental scan was conducted to discover and proactively assess and review available options and digital tools as well as attend webinars on various aspects of the technologies involved.

**Stakeholder assessment:** Informal interviews were held with specific role players (faculty, librarians, technical staff, students) to ensure a collaborative environment, common goals, and conduct a project evaluation.

DISG considers Lulu.com, a web based publishing firm that allows you to publish books, ebooks, manuals, brochures, handouts and much more, using their on-demand printing as an option. Lulu provides the tools and templates to design and format the publication as well as an ISBN. This option is seen to be part of a broader movement in scholarly publishing, in favour of user-generated content, ungated access, author copyright. Credentialing mechanisms are ensured by the involvement of the Faculty and the Library's reputation systems.

DIAG has a long tradition in publishing a series of Technical Reports to provide a continuous update on the Department's research. The interdisciplinary nature of the series is a key feature reflecting the various components of the Department: control, informatics, management and economics. The Department Board decided to move to e-only and that the Library would direct the project. It was decided to opt for the Open Journal System, OJS, hosted on Sapienza's server reflecting the researchers' commitment to Open Access forms of scholarly communication. Maximum endorsement of the series was sought by assigning an ISSN, a DOI to each article, and by depositing the content in Solar, CNR's repository to comply with the legal deposit of electronic publications. To ensure quality the GLISC guidelines (Nancy Style) were adopted and all content was deposited in RePEc to enhance the dissemination of the research.

**Keywords:** Academic libraries, Scholarly communication

## **Information Literacy - Realities and trends in Romanian higher education**

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**Abstract:** Currently, the society faces increasingly more and more with a digital environment, whose impact is observed on all sectors of social and economic life, influenced also the university training, too. Thus, it is required to introduce in training,

whatever field, an information literacy course to develop theoretical knowledge and practical skills concerning the construction, processing and communication of information. In our paper we try to demonstrate that the information literacy instruction is very important for the Romanian university users because it demonstrates the importance of all kind of information (traditional or on line) and how can be used in a scientific form.

**Keywords:** Higher education, Information Literacy, Information society, University library, University curricula

## **Information Literacy as a part of an outreach community program for pre-university learners in South Africa: a case study**

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**Abstract:** Information Literacy is a fundamental component of the academic curriculum as it is here where the skills for finding, evaluating, organizing and using information are taught. For the past four years a team of library staff at the University of the Witwatersrand Library have been involved with a unique program of teaching Information Literacy to pre-university learners whilst they are in the final three years of their schooling.

Our course is based on a three year contact program. The initial course is used to introduce learners to the library, different library concepts and terms and what it is that Librarians can assist the learner with. In the following year our focus is more specifically on the Science Libraries on campus, and finding specific information using search strategies. The importance of the use of language in information seeking is highlighted. In the final phase, we teach about the different kinds of, how to evaluate information, fair use of information and acknowledgement of sources. We have practical sessions where they interact with a multidisciplinary database giving them a different perspective of information obtained “from the internet”. The issue of Copyright and plagiarism underpin all of the courses, and learners are made aware of its importance from the very first sessions held with the library.

With regard to the methodologies used in teaching, we explore a combination of formal lecturing and use different kinds of media in the classroom such as PowerPoint, videos, YouTube clips, discussions, treasure hunts, and interactive group sessions.

This paper will explore the process of working in an academic enrichment curriculum alongside that of the formal school subjects such as mathematics, science, language, computer science, forensic science, molecular literacy, information literacy and social research. It will outline the context of the course we offer with the other disciplines. It will discuss the challenges we faced, the lessons learnt, and our aspirations for the future. The overall aim of the program is “to increase the academic, social and psychological preparation of academically talented learners from socio-economically disadvantaged backgrounds for admission to and success (retention) at South African selective universities.”

**Keywords:** Information Literacy, Pre-university learners, Outreach community program, Talented learners, Library training, Information seeking strategies, South Africa, Case study

## **Information Literacy for learning society and life-long education**

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**Abstract:** The uncertain quality and expanding quantity of information pose large challenge for the society. Information literacy is the abilities to know when there is need for information, and to be able to identify, locate and effectively use that information for the issue or problem at hand. Life-long learning is the goal for which information literacy is an essential enabler. Information literacy is a skill essential for and forms the basis for life-long learning. A learning society is generally considered as basis from which life-long learning can take place. Learning society provides a framework in which life-long learning is allowed to flourish but in fact both elements are mutually supportive of each other.

**Keywords:** Information Literacy, Learning society, Life-long education, Life-long learning

## **Information Literacy from credit based to Integrated Information Literacy: a case of the University of Botswana**

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**Abstract:** Information literacy spells out a set of abilities or skills expected of an individual as a learner or researcher. The University of Botswana, in an effort to provide students with these essential skills carried a number of information literacy initiatives. The initiatives started with library tours that constituted part of the user education program for all first year students to a formal credit based information literacy instructions, under the University-wide General Education Courses. The objective of the program was to equip its graduates with the necessary skills or attributes that empowers them with lifelong skills, covering areas such as concept of information (its characteristics; formats and sources of information); information organization; information access tools; reference sources; periodical literature; searching electronic databases; legal issues of information use and evaluation of information resources.

Teaching of information skills involved all librarians. The delivery mode was through face-to-face lectures and laboratory (lab) sessions that provided opportunities for hands-on practical activities by lab demonstrators. Reflecting on the program one would argue that it was well balanced in equipping students with the needed skills for academic research as well as provision of lifelong learning skills.

However in 2006 the University of Botswana constituted a Task Force to evaluate all GEC programs offered by the University among them the information literacy program. The taskforce used document analysis; literature reviews; internet searches and administered questionnaires to academic staff and students as stakeholders. The review considered the GEC rationale, the concept of GEC, components of the GEC, Electives; Management of the GEC, quality of GECs, students' choice of GECs, Course overlaps, Professional training, etc. One of the elements that came out of the report was that students take some of these courses to gain credit or to fulfil an academic requirement than to gain lifelong learning skills that can be applied throughout life. Therefore a recommendation was made to the effect that there is need to infuse/integrate some GEC skills such as critical thinking; intellectual growth general skills for lifelong learning include information literacy skills into the curriculum.

Therefore from 2011 to date the University library worked together with Communication and study skills to infuse information literacy into the Communication and study skills curriculum. These came through a number of negotiations/interactions between the two departments for example negotiations and workshops. On the 31<sup>st</sup> July, 2012 the two departments met to evaluate the integration/ marriage and the results demonstrated a number of positives amongst others the existence of good collaborative teaching relationship and exposing students to library as resource supporting teaching and learning.

## **Information Literacy instruction and lifelong learning: the use of content analysis in the evaluation of ACRL standards**

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**Abstract:** This research is primarily concerned with the evaluation of an ACRL standards based information literacy course by looking at how information literacy skills contribute to "lifelong learning". This paper presents the findings of a content analysis of student papers from an Association of College & Research Libraries (ACRL) standards-based information literacy course. In LIS literature lifelong learning has been described in two different contexts; as skills required of "a competent and participative citizen" in society and that of the individual. In society, lifelong learning is posited as enabling the individual to contribute to the ongoing creation of a "knowledge based economy"; on an individual level, lifelong learning is referred to in the context of one's personal and professional life (Nazari & Webber, 2012). ACRL's standards identify information literacy skills as the foundation of lifelong learning in the individual (ACRL, 2000). If ACRL standards are to be used as a framework for instruction, do they yield the desired outcome of lifelong learners? The course evaluated in this study is situated at a large research university in the Midwest United States with enrolment coming from undergraduates. This class requires students to create an annotated bibliography and write a reflective piece on how their information skills have developed over the semester. The

reflective portion of this paper was used for analysis; this included 152 papers; 127 of which addressed how the ways students search, evaluate, and use information outside of class had changed. The findings of this study revealed an increase in database use, evaluation techniques, and improved search strategies, and research skills. These findings were not surprising considering the course curriculum and desired outcomes of ACRL standards. The documents also reflected, however, increased levels of self-assurance in students' abilities to find quality sources—so much that a few students indicated they were confident enough in their knowledge to teach research skills to others. Are these findings, however, indicative of lifelong learning or something else?

**Keywords:** Information Literacy, ACRL Standards, Lifelong learning, Content analysis

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## Information Literacy instruction in Turkish academic libraries: an overview

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**Abstract:** The concept of information literacy and its importance for lifelong learning have long been discussed and information literacy is accepted as a survival skill for information society. An information society needs individuals who have lifelong learning skills. Information literacy - the ability to find, use and communicate information - is the keystone of lifelong learning. Information literate people are effective consumers of information, critical thinkers and self-directed learners. They use and communicate information effectively and responsibly.

Every member of information society should be equipped with information literacy skills to be able to succeed in school, at work and in daily life. In order to gain information literacy skills individuals should follow an information literacy instruction program. Libraries, in all sorts, especially academic libraries play a central role in teaching information literacy skills. Creating and maintaining information literacy instruction programs that will support lifelong learning have become one of the primary missions of academic libraries. Today academic libraries play an important role in equipping individuals of information society with information literacy skills.

Although there is a large body of literature related to information literacy, those reporting on research conducted in Turkey are few. This study aims to investigate information literacy instruction practices carried out by Turkish academic libraries. There are 169 universities, 103 of which are public, in Turkey. A survey conducted and an online questionnaire regarding information literacy instruction practices was sent to all

academic libraries within these universities. In this paper, findings of this survey, response rate of which was 69%, will be presented.

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## Information Literacy of LIS students: gathering and synthesizing sources for a literature review

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**Abstract:** Information literacy is understood as the key set of skills needed to recognize when information is needed, the ability to locate and evaluate this information from a variety of sources, and the ability to use the information gathered effectively to fulfil the task at hand. Conducting a literature review for an evaluation research proposal in Library and Information Science (LIS) calls for higher order skills with the ability to find, gather and synthesize multiple sources to create a coherent narrative of the prior work done on the research topic. LIS students are often found struggling through the process. At times, they create an article-by-article summary rather than a synthesis of the literature. Despite the huge and growing amount of literature, there is a lack of effective tools and processes to help students make sense of all the information, find the needle(s) from the haystack and to connect the dots. In this study, the information seeking behaviour of 28 LIS students working on a research design and literature review assignment for an 'Evaluation of Information Services' course will be studied. A set of scaffolds were provided to help students develop the required information literacy skills: 1) lecture and instruction video 2) workshop by the librarian 3) an Excel sheet template for summarising each article and creating themes across articles 4) working with a partner 5) peer feedback 6) instructor feedback. In the 1-month period when students worked on the assignment, they were asked to maintain an online journal with 3-5 posts reflecting on their individual processes of working on the literature review. This study will evaluate the student reflections, the peer feedback, their literature review assignments, as well as student responses in a survey questionnaire to ascertain which scaffolds were most useful to them in learning to carry out the review. The survey will also ascertain the role of each scaffold in different phases of the literature review process – when starting, mid-way and in the end. Insights gained from the study should shed light on the process by which students conduct a literature review, as well as their fears, frustrations and triumphs. Findings will especially be useful for information literacy instruction across disciplines by highlighting the sets of tools, sources and scaffolds most useful in different phases of the literature review process.

**Keywords:** Literature review, Creative instruction of information literacy, Scaffolds

## Information Literacy skills of Greek high school students and the development of an online information literacy tutorial



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**Abstract:** In this paper we explore information literacy skill levels among high school students and the need to incorporate information literacy in the education process in Greek secondary education. More specifically, a survey was conducted among first year high school students in Thessaloniki, Greece. The procedure provided 344 usable questionnaires. The results of the study suggest that first year high school students in Greece are accustomed to using computers in their daily lives, they use the Internet to satisfy personal needs, but they have problems in locating and evaluating information for school work. The findings of the present study clearly suggest the need to embed information literacy instruction into secondary education, and also the need to create an online information literacy tutorial. Therefore, an online information literacy tutorial is being developed in line with Big6 model and constructivist approaches.

**Keywords:** Information Literacy, Online tutorial, High school students, Education process, Greece

## **Information Literacy training modules developed for the University of Bolton WCMT Campus Sri Lanka: case study and best practices**

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**Abstract:** Information literacy is more relevant for the developing nations such as Sri Lanka to enable them to bridge the growing info - divide between the developed and the developing nations. The paper emphasizes the approach to the concept and practices of IL.

The term Information Literacy (IL), sometimes referred to as information competency is generally defined as the ability to access, evaluate, organize and use information from a variety of sources. It is a basic human right to lifelong learning. There are two main reasons why students need to use information effectively: because it improves the quality of their learning; and it is an essential skill for them to take with them into their working lives. Author emphasize that the concept and practice of IL is a must for all undergraduate and post-graduate students.

In an academic setting there is a need to adopt a holistic approach to IL. It has to commence with the learner at the centre, interacting with local (in house) sites of information and extending his/her reach to the sources of information available across the globe.

Since IL is not yet established its roots in Sri Lanka higher education setting, University of Bolton Academic Centre in Sri Lanka had developed an IL module for all the academic programs across the Sri Lanka Campus.

**Keywords:** Information Literacy training modules, Information Literacy, Lifelong learning, IL Competency Standards for Higher Education

## **Information needs and behaviour of future LIS professionals in Romania**

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**Abstract:** The changes in user behaviour in the information seeking and retrieval process represent one of the important challenges which academic libraries have faced lately. Users' information needs and practices, their expectations have evolved significantly, especially during the last decade along with the advance of the new technologies which offer multiple opportunities for the development of participative and customized information services. In this context, starting from the results of a study based on a questionnaire distributed to LIS (Library and Information Science) students from the undergraduate and master's programmes at the University of Bucharest, this paper investigates the information practices and the proposals which this special category of users – the future information specialists who will have to find themselves ways to respond to the challenges of the digital environment – makes for the improvement of the information services offered by Romanian academic libraries. LIS students are not an accidental choice for this study, having in view that a similar survey involving LIS students from the same university took place ten years ago and also our supposition that the theoretical knowledge they acquired as LIS students and their experience as information users will lead to interesting observations and useful results for the academic libraries in Romania.

**Keywords:** Information users, Information needs, Information behaviour, LIS students, Academic libraries, Romania

## **Information needs and seeking behaviours of physicist: examples of Atatürk University and Eskişehir Osmangazi University in Turkey**

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**Abstract:** Information generation increasing especially since second half of 19 century has influenced all fields and/or social dynamics directly. Intense generation of information, being an indispensable value for individuals and organisations; access to information and efforts to use them in the activities revealed the importance of information access concept. Information access is the process for identifying, formulation of the ways providing access to the information and information sources and bring them together with the information which the individuals and/or organisations need.

Experienced improvements and continuous changes in information and communication technologies accelerated and facilitated information access process. Nonetheless this enhancement in information generation brought along the data warehousing and access issues. Developments in information and communication technologies has changed data warehousing and information access procedures and this has directly influenced the information search behaviour of the individuals. Especially easy and fast usage of internet gave cause for individuals to evaluate the internet as an instrument for solution, to gain new familiarities and behaviours. Information search behaviour may be verbalized as full extent of behavioural body the individuals developed and displayed for access to information which individuals need. Hence individual meeting its information requirements through own observations, experiences, environment, printed and electronic information sources, nowadays be in need of information access in a short time to satisfying relevant all qualified informations.

User surveys for information services began in mid 20. century, while comprising different fields in different periods nowadays involves user focused and meeting its requirement studies. Dealing with determination of information search in framework of user searches lead the way for information specialist on how to propound the information services. Hence understanding that the subject of user searches are constituted by the individuals and relation of the individuals with information being accepted nowadays and many studies performed from various aspects in this direction. For this reason the user surveys performed regarding information search behaviour put forth versatile and interdisciplinary properties.

This study is the survey made to determine how the instructors of Department of Physics employed in Atatürk University and Eskişehir Osmangazi University meet their information requirements, which behaviours are exhibited for information and information sources and information searches accordingly. And also documental analysis and interview method were used as methodology to get the information.

**Keywords:** Information needs, Information access, Information seeking behaviours of physicist

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## **Information professionals in business context: new professionals, old skills**

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**Abstract:** This communication aims to present some reflections regarding the importance of information in organizational context, especially in business context. The ability to produce and to share expertise and knowledge among its employees is now a key factor in the success of any organization. However, it's also true that workers are increasingly feeling that too much information can hurt their performance. The existence of skilled professionals able to organize, evaluate, select and disseminate information in organizations appears to be a prerequisite for success. The skills necessary for the formation of a professional devoted to the management of information and knowledge in the context of business organizations will be analysed. Then data collected in two focus group discussion with students from a graduate course in Business Information, from Polytechnic Institute of Porto, Portugal, will be examined.

**Keywords:** Information professional, Business information, LIS education

## **Information retrieval in institutional repositories: proposed an ontology for Historical Organizational Memory**

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**Abstract:** The Historical Organizational Memory consists of the main documents that register the trajectory of an institution. The ontologies aim to make sense of the content of these repositories, using the semantic relationship of the terms that can represent the area. This work establishes the basis for proposing an ontology that serves as a reference model in the Historical Memory Organization field, promoting accurate responses from search engines and information retrieval. The universe of this research is represented by companies participating in the Permanent Forum on Knowledge Management, Communication and Memory of the Brazilian Association of Business Communication (ABERJE), which already have initiatives in Historical Organizational Memory (HOM). It identifies, among other things, whether companies use a standardized instrument of information representation, such as controlled vocabularies, taxonomies and thesauri. We used the exploratory research, interviews with data collection, followed by content analysis and description of the results. It is intended that this ontology will serve as a reference model for Historical Organizational Memory projects, which can be extended by domain experts from the declared and interrelated concepts in this proposal: types of documents, collections, subjects covered by the items, the target audience and information dissemination channels.

**Keywords:** Ontologies, Organizational Historical Memory, Organizational Knowledge Management, Representation of Information

## **Information seeking behaviour of the teachers and students of government colleges of Sikkim**

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**Abstract:** The information needs of different categories of users are not the same in nature; they differ qualitatively quantitatively and geographically. Thus, the area of information seeking behaviour of users assumes special significance. So, the authors present this paper based on a topic 'Information Seeking Behaviour of The Teachers And Students of Government Colleges of Sikkim' to find out the information literacy and seeking behaviour of the Teachers and Students of three Government Colleges of Sikkim i.e., Tadong Government College, Namchi Government College and Sikkim Government Law College Gangtok. The paper points the information flow in three Government Colleges of Sikkim deals with the Teachers and the Students of these Colleges and their various needs in current environment. Study attempted to touch every aspect of the users. To achieve the target, the analytical study of information adopted.

## **Information technology services and school libraries: a continuum of social justice**

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**Abstract:** This brief paper first develops a social justice typology that maps out conceptions of social justice and their relationship to library services. Based on this typology, it presents research findings that seek to understand what social justice principles facilitate the provision of information technology service in school libraries. This paper is based on data from focus groups of seven exemplary high school libraries in the state of New Jersey. Using a social justice framework, it was found that no single social justice principle guided specific actions of the school libraries studied; instead a process of moving between different principles of egalitarianism and utilitarianism based on resource availability was used by teachers and school librarians in providing information technology service to their respective schools. This research presents a qualitative methodology for studying social justice principles that addresses the sustainability of school libraries and their ongoing transformation and development as community information technology hubs and learning centers.

**Keywords:** Social justice, Library and Information Science, Technology service, School libraries, Information behavior, Information seeking, Information environments

## **Information use pattern of school teachers in rural areas of Nigeria: a mixed method approach**

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**Abstract:** This paper has investigated the information use pattern of school teachers in rural areas of Nigeria. The objectives of the study were to identify the type of information sources and resources that school teachers used for their teaching and learning. Mixed research methodology was used; questionnaire, interview and observation were the only instruments used for the study. The population of the study comprises all the school teachers in public primary schools of Nigeria. The findings of the study showed that majority of the school teachers used different types of information sources and resources. School teachers in this study had used the information found for reference purposes. They photocopy the area of interest, jot down the main points, read the article directly and print a copy. The findings also showed that there was over dependence on headmaster/school authorities, library and information centres and printed source/resources category. Books were the most popular resources needed and consulted by the school teachers in this study. Barriers to information were identified and recommendations were provided.

**Keywords:** Information use, School teachers, Rural areas, Mixed method research

## **Information Visualization**

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**Abstract:** Information Visualization is a method of presenting data or information in non-traditional, interactive graphical forms. By using 2-D or 3-D color graphics and animation, these visualizations can present the structure of information, allow user to navigate through it, and modify it with graphical interactions. Information visualization is a branch of computer graphics and user interface which are concerned with the presentation of interactive or animated digital images to users to understand data. Information visualization is the use of interactive, sensory representations, typically visual, of abstract data to reinforce cognition. One of the visualization's applications is the Geographic Visualization, such as: Geographic information system (GIS). Web-Based Visualization is another important method of visualization.

**Keywords:** Information Visualization, Geographic Visualization, Web-Based

## **Innovation diffusion in libraries: old and new perspectives**

## *Christos H. Skiadas*

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**Abstract.** One of the carriers to growth is the human ability to adopt and diffuse innovations. To this regard the development of our societies from the very beginning was based on a large amount of innovations in the social and economic organization, technical and technological progress, communication systems, skills and patterns, and of course systems, methods, techniques and organization schemes to preserve and disseminate knowledge and the related cultural structure and infrastructure. Libraries played an essential role over the centuries, as a result of the adoption and diffusion of writing and reading skills, methods and techniques from people and organized groups few thousand years ago. Passing from the personal work of copying books to the printing machines of Gutenberg, libraries lost a part of their central role. Producing (copying) books by hand and selling these books was a main part of the library works along with the traditional librarian services. Libraries, mainly based on state or non-privet groups, decided not to enter into the fast growing printing system keeping an intellectual like view of preserving and disseminating knowledge. This was in accordance to the governmental, societal and even cultural views of the new innovation and technology of printing. Printing became a business and as such should be a part of the market and not of the libraries. To this end libraries continue to survive until nowadays without entering into the printing business. They became consumers, not producers for the last five centuries. The consequence of non adoption of the printing systems by the libraries resulted in poor financial support and the full connection or interconnection with governments, universities, special groups and supporting grants. The non-adoption and diffusion of Gutenberg's invention and the new printing system was radical for the course of libraries.

Last decades libraries face the new challenge. Five centuries after Gutenberg we came back to the same scheme. Producing and coping books came back to the writer and supporters. The electronic systems and the related innovations are mostly suited to libraries. That it is needed for libraries is to change profile coming back in the before Gutenberg's days producing and preserving books and printed material. This is not an easy task. It is needed for libraries to adopt and disseminate in their systems very many innovations and organizational forms from the market something not very easy if we take into account the tradition in libraries and the education of librarians. That it is more likely to be done is a growing interconnection of libraries with the fast changing printing houses, the later directed from the market needs and the electronic books and materials thus making the preservation systems and the libraries an essential part of the new era. A problem for the libraries is that traditionally are not self-financed thus making their position vulnerable. The preservation and dissemination systems tend to be based mainly on computing and the related innovations. That is why it is important for libraries to make strong connections and partnerships with printing houses, computer centers and large software based systems. The economic situation is getting bad in several countries and this will affect libraries if they stay in the traditional form. Fast adoption and diffusion of innovations is very crucial for libraries future, especially organizational innovations important for the connection of libraries with the market in the new changing environment. By passing more and more the preservation and dissemination of knowledge to privet firms, a new environment and a very bad situation for the future of libraries is developed. The need for cooperation is more than important.

**Keywords:** Innovation, Publishing systems, Library change

# **Innovative ICT practices in management of Indian Agricultural Libraries**

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**Abstract:** The IT industry in India has played an eminent role in putting the country into global map. The success of Indian firms and professionals in IT during the last decade has been not only dramatic but also noteworthy. Several instances of bridging digital divide across India through projects of e-governance, e-agriculture, e-education and learning, e-business have been catching up and providing multitude of services at one stop to simplify and ease lives of common people. If we look at the penetration of IT enabled services in conventional degree granting bodies like universities in India, the situation is quite diversified. While some have made considerable progress the others are still behind. The rate of growth of IT based services and infrastructure in public funded universities, particularly the Agricultural universities has been progressing though slowly. The Agricultural University libraries in India have been integral part educational process and have been playing a significant role in shaping the future of education, research and extension activities in the country. The information professionals of agricultural universities have gone a long way in molding the future of the libraries and adapting it to the latest technological developments from time to time. The advent of information and communication technology has shown remarkable changes in the flow, contents and formats in which the information is presented. Keeping pace with these technological developments the Indian agricultural libraries are now moving towards the era of digitalization and collaboration to provide efficient retrieval system and access to information round the clock.

The article explores the state of 44 Indian Agricultural Libraries across the country including Veterinary, Fisheries and Animal Sciences universities and how they have transformed in the digital and collaborative era. Discusses in detail about the new and emerging IT techniques that have been used by these libraries in their functioning for delivering knowledge or products, and the collaborative efforts made by them for removing physical boundaries. Highlights various digitization projects in progress and discusses various innovative practices in managing agricultural Information system and services for instance the e-Granth for Agri-Cat, Krishi Prabha- electronic dissertation, CeRA for e-journals, and activities involving Institutional repositories for example Krishi Kosh, digital content management, consortiums etc. Websites of library home pages linked to agricultural universities and documentary as well as web resources were studied to find examples of services implemented by them using various Information and communication technologies. E-mails were sent to the libraries and telephonic discussions were made to know some of the services which were not clearly mentioned in their home pages.

The study finds that the agricultural libraries in India have strengthened their efforts to reorganize their resources as per the need of the digital era and to bring libraries and patrons in close proximity with technology and, further develop these resources in order to deliver library services using latest IT tools and techniques. The launch of world bank aided National Agricultural Technology Project (NATP) in 1998 and National Agriculture Innovative Project (NAIP) in 2006 had marked new chapter in agricultural research, these projects broadly aims to make agricultural research knowledge based and IT oriented so, that it can cater to the market and meet the fast changing consumer



demands. Indian Council of Agricultural Research (ICAR) which is implementing the projects is reaching out centers like Agricultural universities, Science and Technology Institutes, private bodies etc for innovative ideas and research. As libraries have been playing a crucial role in supplementing research, the grants provided by ICAR through these projects have made digital information resource development more successful. Agricultural libraries became an inextricable part of nationwide consortium CeRA (the Consortium for e- Resources in Agriculture) and are providing access to more than 3000 e-journal of national and international repute, besides, strengthening of digital infrastructure in terms of computers systems, application software's, Local Area Network and VSAT or leased line Internet facility. Twelve libraries across different regions of the country are participating in E-Granth a project under component-1 of National Agriculture Innovation project (NAIP) to provide digital resources including the OPAC of participating libraries, important institutional repositories, rare books, old journals etc. accessible publically over internet under National Agricultural System (NARS) in partnership with Online Computer Library Center (OCLC), USA.

Out of 44 agricultural libraries surveyed most have automated their house keeping activities under LAN and provide access to their in-house OPAC. However, the presence of OPAC on web is still in a developing phase for most libraries. Few universities for example the Sher-e-Kashmir University of Agriculture Sciences and Technology, the CSK Krishi Vishwavidyalaya, Palampur, and G B Pant University Of Agril & Technology have their catalogue accessible over public Web (WEBOPAC). If we look at the extent of mechanization completed by the Indian agricultural university libraries it is interesting to note that most libraries progressed well in automation but are considerably behind in digitization or towards building digital resources/ libraries. It is noted that Automation was initiated by most libraries for creating database of their library holdings so as to develop the OPAC for facilitating and easing the retrieval system however their efforts in hosting the OPAC over public internet is still in early phases. The study indicates that only 3 universities in North Indian states, the C S A University of Agriculture and Technology, (CSAU&T, Kanpur), and the SVBP University of Agriculture & Technology, (SVBP, Meerut), and Narendra Dev University of Agriculture & Technology, (NDUAT Faizabad), are in initial phases of developing their OPAC's . While in south Indian states, all 4 Agricultural Universities have their OPACs functional under Local Area Network. The study further reveals that automated inventory management in many universities having large collections is yet to function under mechanized environment, The main bottleneck behind this situation or slow progress is lack of funding and training needs of senior staff who are on the verge of their retirement and, have been showing little interest in IT oriented activities of the library.

Concludes with note that most Indian Agricultural university libraries have embraced technology and are using a number of practical ways and IT tools to disseminate information to their users community. With grants from World Bank and ICAR under NATP and NAIP project agricultural libraries have been able to realize their dream projects. However, government financial support and good policy making from time to time are required for sustainable development of digital information resources management in agricultural libraries and information centers. A beginning has already been made with the launch of world bank aided projects like NATP and NAIP implemented by Indian Council of Agricultural Research, but how sustainable shall be the grants thorough these projects is important and has to be explored.

# **An integrated analysis of quantitative and qualitative data for identifying factors in information services: a working paper**

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**Abstract:** The National Discovery for Science Leaders (NDSL) is one of the leading information services for researchers and developers in science and technology in Korea. Launched in 2008, the service has been governed by Korea Institute of Science and Technology Information (KISTI), a national research institute to establish national infrastructures of research and development. Since then, a number of service-related R&D projects have been conducted with the primary goal of improving services and developing measures of NDSL service performance. The projects include use statistics, user profile analyses, service quality measurements, user satisfaction surveys, and surveys of scientists' information seeking and use in their research life cycle. While each of the research projects has fulfilled its intended research goals, they have not been very successful in identifying overarching service performance factors. We attribute this problem largely to the narrow focus of the previous research on a couple of aspects of NDSL's services. Hence, we have launched a new research project to overcome the difficulties in service improvement and the development of performance measures by re-using and re-analyzing previous research data.

The purposes of our current project are trifold: 1) to identify additional statistical data elements needed to improve the NDSL's current statistical data collection system; 2) to develop candidates for performance measures of NDSL's services; and 3) to suggest improvements for the services by developing a service map of NDSL. For these purposes, we scrutinize the data collected in the previous projects and analyze them in an integrative way. The project involves several stages: 1) identifying service factors from the surveys of service quality and satisfaction; 2) confirming the factors with the results from the investigations of researchers' information behaviour; 3) matching the confirmed factors with use statistics to identify needed statistical data elements; 4) developing performance measures based on the factors identified; and 5) developing a service map for the NDSL service to improve existing services. We are now in the second of these stages and will be reporting our interim results: factors of NDSL information services in terms of service performance by integrating quantitative data from the service quality survey and qualitative data from the research of scientists' information behaviour. In this stage, we also expect to identify weights for individual factors. Our interim results are expected to provide a strong basis for subsequent stages: identifying additional statistical data elements that will help us to understand use behaviours, and developing service performance measures. Additionally, we will also report the overall expected results of this research project.

## **Integrating information literacy into English course for academically unprepared students**

## ***Lyndsay Smanz***

Lecturer, University of Wisconsin-Milwaukee, School of Information Studies, USA

**Abstract:** This presentation will focus on University of Wisconsin-Milwaukee's (UWM) efforts to teach information literacy to academically unprepared students. UWM is strongly focused on retaining students and improving graduation rates. The Academic Opportunity Center (AOC) at UWM helps students who wish to further their education in college and show academic potential, but are not adequately prepared for university study based on their high school GPA or test scores. These students take a number of remedial classes and specially designed classes to help them build the skills they need to be successful. Since the UWM Libraries' are not able to offer credit bearing classes, the School of Information Studies (SOIS) offers a one-credit "Information Literacy" class. This 8 week course, based on the ACRL information literacy standards, helps students learn how to navigate the information world, focusing on information resources needed to produce quality, college-level research assignments. This includes effectively locating, evaluating, and ethically using the information. SOIS has partnered with AOC by offering and promoting this course to these students who are often unprepared to begin college-level research and writing. This past year, the course was required by AOC students taking English 102 and the syllabus was designed to focus on the specific needs of the final research paper for the English 102 class. This allowed the English 102 instructor to spend less time talking about sources and research, and more time working on writing skills. We hope to continue and enhance this partnership in the future and make the Information Literacy class a requirement of all AOC students, and be able to assess and gather data on student success and retention to use as a springboard to further promote the class to other populations on campus. The presentation will contain information on SOIS's experience of teaching information literacy to this vulnerable college population and trying to forge relationships with departments and programs across campus.

## **Integrating Information Literacy into the curriculum: creating and implementing an information literacy curriculum map**

***Leslin Charles***

Coordinator, Information Literacy Instruction, Berkeley College, USA

**Abstract:** In this digital age, the onus lies on librarians to prepare students to be successful lifelong learners who are agile information seekers that adapt to changing modes of information delivery and are selective, critical, ethical users of information in all formats. With limited staff, a burgeoning student population, and constantly evolving curriculum, how can we ensure that students are receiving a systematic/hierarchical set of Information Literacy competencies? By creating and implementing an Information Literacy Curriculum Map which provides a cohesive delivery of Information Literacy skill building across the curriculum.

This session will address the creation, structure, and implementation of an Information Literacy Curriculum Map as a means of formally integrating Information Literacy into

the College curriculum. This includes the creation of learning outcomes that adhere to the ACRL Information Literacy Standards and compliment assignments and learning opportunities across the curriculum of Berkeley College. The Map has been implemented in conjunction with our existing Information Literacy Assessment Plan which is thorough and includes Information Literacy Learning Outcomes, Peer Assessment, and Program Assessment. The purpose of the Information Literacy Assessment Plan is to determine whether our Information Literacy programs and services achieve the intended outcomes and to use these assessments to improve the quality of said programs and services

Topics will include:

A Rationale for IL Curriculum Mapping

A shift in the role of Library Liaisons

Curriculum Change

Gaining Faculty Buy-in

An Institutional Perspective

Using technology to leverage instruction

Attendees will come away with a clear understanding on how to structure an IL Curriculum Map and how to gain buy-in within the library and externally. Further they will come away with an understanding of the changing role of the librarian as we accept that traditional Information Literacy Instruction will serve us as we create our Information Literacy programs but that more sophisticated approaches are needed as the institution increasingly acknowledges our value.

## **Intensity of information system use as a factor in evaluations made by information users. The example of Polish digital library users**

*Mirosław Górny*

Department of Information Systems, Adam Mickiewicz University Poznań, Poland

**Abstract:** Evaluations made by the users of information constitute one of the methods used to diagnose the state of an information system. However this method needs to be applied with great caution. Users' evaluations certainly help to identify those elements of a system whose functioning deviates significantly from the norm, in both negative and positive senses. However such evaluations should not be treated as direct assessments of the system. This is because users' evaluations are dependent on many factors, one of which is the intensity of system use.

The present work draws attention to the differences in evaluations of Polish digital libraries which can be attributed to intensity of use. Surveys were conducted among students and among academic staff, and the respondents divided into three groups. The first consists of users making frequent use of a digital library - these were taken to be those using such a library more often than once a week. The second group consists of users who use the library at least once a month but not more than once a week. The third group contains users who use the library more rarely than once a month.

The features of the digital library that were subject to evaluation included resources, quality of scans, retrieval, information searching, ease of use, and reliability.

In the case of certain features, the differences in evaluations proved to be very noticeable. Generally speaking, users who frequently make use of the libraries give more positive evaluations than those who do so more rarely. However there are also cases (for example,

in the assessment of reliability) where more intensive digital library users give lower scores than the less frequent users.

**Keywords:** Information systems users, Digital libraries

## **International collaboration in evaluation of information literacy user needs**

*Angela Repanovici<sup>1</sup>, Ane Landoy<sup>2</sup>, Natalia Cheradi<sup>3</sup>*

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<sup>2</sup>Bergen University Library, Norway

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**Abstract:** In teaching information literacy a number of methods for formative or summative assessment have been used successfully. In our international project "Development of New Information Services for Moldovan Higher Economic Education - CPEA 2012/10091" we use electronic questionnaires in assessing the level of skills a student has in identifying, finding and evaluating the information needed for a task; evaluating and retrieving information; communicating information ethically and avoiding plagiarism. The results from the survey of Moldovan students will be presented, compared with similar international studies.

## **International presence of project management in the university curricula in Library and Information Science**

*Rosario Arquero Avilés, Silvia Cobo Serrano and L. Fernando Ramos  
Simón*

Faculty of Documentation Sciences, Complutense University, Spain

**Abstract:** Proper project management in information and documentation centers stands as one of the main pillars for the correct working of these units. Given the importance of this managerial technique, Library and Information Science's professionals and students should receive a solid knowledge on the subject, which is included within the planning of information and documentation units as integrated function in the Management field. According to this framework, this paper analyzes the international presence of project management in the university curricula in Library and Information Science.

**Keywords:** Project management, Planning, Professional training, University curricula, Library and Information Science

## **Internet infodiversity: state of the art and future trends**

### ***Jonathan Hernández Pérez***

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**Abstract:** Infodiversity is defined as the defense of the existence of multiple and diverse manifestations of information, which implies the convergence of different types of information. In this context, infodiversity can be studied from its manifestations and can be applied to a specific geographical area, media or time period, thus the object of study in this research is Internet.

This paper aims to develop the manifestations of infodiversity on the Internet, through its five aspects; plurality, recovery, conservation, availability and free access to information. It also discusses issues related to privacy, censorship and freedom of expression on the Internet.

This study also highlights that infodiversity has existed since humans began to produce information and encompasses all the information produced by humanity from different social groups in all historical periods and also explain the role of the library in the infodiversity.

From a methodological perspective, it is important to mention that the achievement of this paper has been based on information and statistics from international organizations that have been selected according to their relevance to each of the elements of the infodiversity.

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## **Investigate quantity and citation of medical papers related to the Holy Quran on Scopus Database**

***Rasoul Nouri, Firoozeh Zare Farashbandi***

Isfahan University of Medical Science, Isfahan, Iran

#### **Abstract:**

**Scope:** The present study aims to investigate the quantity and citation of medical papers related to the holy Quran on Scopus database.

**Material and methods:** This is a descriptive – applied study done using citation analysis method. The statistical population is all of the papers related to holy Quran in medical science fields which have been indexed by Scopus database (77 different papers). Descriptive statistics and MS Excel software were used to analyze the data gathered.

**Findings:** The Present study showed the total number of references to the 77 papers in the statistical population to be 180 cases and each paper was cited 2.23 times in average. The papers were mostly cited in the year 2009 with 32 cases followed by 2008 with 32 cases and 2010 with 25 cases. Also most of the papers on this field were published on the

“Journal of Semitic Studies” with 12 published papers followed by the journal of “Medicine and Law” with 3 published papers.

**Conclusion:** The number of the papers concerning the teachings of holy Quran on the medical science field indexed on Scopus database was too few, this shows that the Muslim researchers either didn't use holy Quran in their studies to a great degree or else hadn't published their findings in an international scale. In order to increase the quality and quantity of scientific output on this field and also for spreading the teachings of holy Quran on fields of medical science, it's necessary for Muslim researchers to improve their skill in English language and also for the quality and quantity of the journals published by Muslims to be improved, making them suitable for indexing by reputable international databases such as Scopus.

**Keywords:** Holy Quran, Medical science, Citation analysis, Scopus database, Scientific output

## **Investigating e-service quality criteria for university library: a focus group study**

*Olga Einasto*

Head of Library Services, University of Tartu Library, Estonia

**Abstract:** In the age of self-service technologies, library specialists need to understand what criteria are used by customers to evaluate library services. This study contributes to the literature by identifying the major e-service evaluation criteria from the point of view of users of the largest university library in Estonia. Focus groups were used to identify the most significant criteria of e-service quality, and participants brought out 15 quality criteria. The list of criteria is explained and discussed.

**Keywords:** Service quality, E-services, University libraries, Focus groups

## **Investigating effective factors on laptop technology acceptance by academic library users in Isfahan based on ITAMM model**

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<sup>2</sup>Faculty Member, Information Studies Lab, University of Tehran, Tehran, Iran

**Abstract:** Today, the possibility for using portable computer devices, especially laptops has been provided by wireless network provision in academic libraries. Applying this type of technology has different advantages for user as well as libraries. The present study attempts to examine effective factors on laptop technology acceptance by academic library users in Isfahan city based on ITAMM model. The research methodology is survey type and ITAMM model questionnaire was used for gathering data which includes 15 (construct perceived ease of use, perceived usefulness, intention to use, usage behavior, attitude toward using, subjective norm, perceived behavior control, job

relevance, result demonstrability, system or tool experience, tool functionality, task-technology fit, mobility, security, adaptability). The research hypothesis is based on examining significant relationships between every variable pairs which are contained in ITAMM model frame. Simple Random Sampling method was applied in this study and its statistical population consisted of 113 users in academic libraries in Isfahan city and necessarily used their personal laptops in library wireless environment. The findings revealed that all constructive factors of ITAMM model had effects on laptop technology acceptance in these libraries except system or tool experience. However, the intention to use this technology ultimately did not lead to its usage behavior. Furthermore, the mentioned construct of perceived usefulness had the highest rate of influence on laptop technology acceptance in libraries.

**Keywords:** Laptop technology, ITAMM model, Users, Academic libraries, Acceptance

## **Investigating health information seeking**

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**Abstract:** Challenges and benefits of using qualitative and quantitative methods (QQM) to investigate health information seeking in a medically underserved population are described. QQM were used in two studies at the same urban health clinic to identify patients' access to and use of the Internet as well as their response to tailored text messages with links to credible websites selected by health science librarians.

**Keywords:** Health information services, Health Information Literacy, Health information sources, Information seeking behaviour, Internet access, Digital divide, Text messages

## **Investigating information technology preferences: methodological issues**

*Irene Lopatovska*

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**Abstract:** In the world of ever changing technology, it is important to understand our clients' (or potential clients') preferences for information tools in order to better address their information needs. This paper describes three information preference studies that were conducted using various methods, and discusses the strengths and limitations of each method in the context of information use research.

The first study aimed to understand information behavior of subway commuters in two large metropolitan areas: New York City, USA and Paris, France. The study used observation, questionnaire and interview methods to collect data about the types of information tools used by commuters and reasons for choosing these tools (Lopatovska, 2012).

The goal of the second study was to understand users' preferences for various information sources (online, human, print, etc.), relationships between user preferences and the types of tasks users engage with, and emotions associated with various



information tools. The data were collected over the course of ten days using electronic journals and interviews. To better understand users' attachment to certain information tools (e.g. search engines), participants were asked not to use the technology for several days (Lopatovska et al., 2012).

The third study focused on understanding information technology use, and specifically e-readers, by graduate and undergraduate students of several New York universities. The study used survey, interview and focus groups methods to collect quantitative and qualitative data on the use of information technology, especially e-books and e-readers, for academic purposes (Lopatovska et al., in print).

The methods described in the article help to address a range of research questions related to information technology preferences, from high level understanding of the types of information technologies that are being used, to understanding the circumstances of use and reasons for choosing specific tools. Each of the described methods has strengths in addressing specific types of research questions and limitations that can be minimized by the use of complementary methods, use of standardized instruments, increase of project resources, and other techniques. The described methods can be used in various setting (e.g., the methods used in a commuter study can be applied for investigation of library visitors' behaviors). An additional benefit of the discussed methods is that they can be used by inexperienced researchers who have had minimal training. All the reviewed projects were conducted as part of graduate courses, offering master-level students an opportunity to conduct research.

**Keywords:** Technology preferences, Technology adoption, Information use, Research methods

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## Investigating the distribution of countries' disciplinary profiles

*Irene Bongioanni<sup>1</sup>, Cinzia Daraio<sup>2</sup> and Giancarlo Ruocco<sup>1</sup>*

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<sup>2</sup>Department of Computer, Control and Management Engineering Antonio Ruberti, University of Rome "La Sapienza", Italy

**Abstract:**

### **1. Introduction and research questions**

The disciplinary structure of the scientific production of countries has been much studied in the literature. Several studies have analysed national publication profiles. National publication profiles indeed show interesting features about a country's research system and its national scientific policy.

A commonly used approach is based on the study of publication profiles by discipline. Within this framework, the world's scientific output is divided into major scientific fields, and the relative contribution of each country with respect to each field is illustrated on a radar chart. The publication profile of a national research system is then measured by the Relative Specialization Index (RSI) which indicates whether a country has a relatively lower or higher share in world publications in a given discipline than in its overall share of world total publications. Besides, several measures of similarities or diversities (dissimilarities) over given categories have been proposed, including the Pratt index, the Shannon entropy, the Stirling's diversity and the Stirling-Rao diversity measure (see for a recent systematization Zhou, Rousseau, Yang, Yue and Yang, 2012 and the references therein cited). Much less explored in the literature is the investigation on the distribution of similarities or diversity measures of national scientific profiles. The main objective of this paper is to propose an overlapping approach to assess the similarity or diversity of countries' disciplinary specialization and investigate countries' overlaps distribution. This analysis is particularly useful to measure whether countries have very similar scientific profiles or show differentiated patterns. The usefulness of the proposed approach is illustrated by comparing the national disciplinary structures of European countries.

### **2. Data**

Data come from Scopus database and refer to the scientific production of European countries in the 27 Scopus subject categories (disciplines) from 1996 to 2011. The available variables include: number of articles (including articles, reviews and conference proceedings papers) in integer and fractional counts; total number of citations on a 4 year window, relative citation impact, number of articles in top 10% of most highly cited articles in a discipline, number of internationally co-authored papers, number of nationally co-authored papers and number of single authored papers. These data have been provided by Elsevier within the Elsevier Bibliometric Research Project "Assessing the Scientific Performance of Regions and Countries at Disciplinary level by means of Robust Nonparametric Methods: new indicators to measure regional and national Scientific Competitiveness".

### **3. Method**

The overlapping approach we propose is borrowed from the spin-glasses literature in physics (see e.g. Parisi, 1983). The investigation of the distribution of countries' overlap is an interesting approach to compare countries scientific profile. The comparison can be done with respect to a given distribution (e.g. the uniform distribution), or to an average value, or to compare two national systems. If the distribution of overlaps shows a peak near minus one, this means that countries have a very different disciplinary profile; on the contrary, if the distribution presents a mass on one then countries have almost the same disciplinary specialization.

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# **An investigation and analysis of the application of Web 2.0 in University Libraries in Bangladesh**

***Md. Anwarul Islam***

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University of Dhaka, Bangladesh

**Abstract:** The service philosophy of user-centered and harnessing collective intelligence has brought important changes in information creating, accessing, exchange manner and service platform, all kinds of websites provide tools personalized, interactive, free and open user service in succession, which can be the development trend of Internet. Meanwhile, Web 2.0 information environment also brings unprecedented challenges to libraries as these technologies can greatly weak the status of libraries in information services field (Fan Bingsi, 2005). The new wave of applications of Web 2.0 related technologies in libraries has gained increasing popularity globally. The Association of College and Research Libraries Environmental Scan (ACRL, 2007) urges librarians to facilitate new approaches to library services by continually assessing the impact of Web 2.0 on library services and the ways in which users view the library, including the use of social networking sites, wikis, blogs, RSS feeds, and recommendation systems. Compared to the push to introduce libraries to specific Web 2.0 tools, little has been done to study the overall development of these efforts. In Bangladesh, there is no study on the analysis and application of web 2.0 in the university libraries in Bangladesh. This research paper will provide an overall picture of the application of Web 2.0 technologies in the university libraries in Bangladesh. The focus of the research is what types of Web 2.0 technologies are applying in such libraries as well as their function and user interface. The university libraries which have there websites will be selected to investigate the application of Web 2.0 technologies. Content analysis will be used in terms of quantitative approach. Data will collected by accessing these university libraries websites within three weeks. It is apparent from Webometrics studies that most of these university libraries do not have direct library website and web-based library services are very limited (Islam, 2011). Very few of libraries adopted Web 2.0 technologies. This study will identify how many web 2.0 tools are using and what are the situations of using RSS. The applications of Web 2.0 technologies among Bangladeshi university libraries are not extensive and profound enough. The findings can be utilized to evaluate the status of Web 2.0 technology applications. The statistical data are very useful and authentic sources for improving the level of Web 2.0 technology application. It may enable future research to analyze other aspects (e.g. the application of RSS or Blogs for services). This unique study will explore the application of Web 2.0 mainly in Bangladeshi university libraries that deployed any types of Web 2.0 technologies and recommendations will also be provided. It is believed that this study will be very useful for Bangladeshsi university libraries in evaluating/deploying Web 2.0. Library managers, librarians, and other libraries may also find this helpful, once they decide to implement such technologies in their libraries.

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## **Involving and empowering users to shape New Service Models at the University of Illinois Library**

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**Abstract:** The New Service Models Program at Illinois is an ambitious program to reshape a highly decentralized departmental library system and reimagine library services for the 21st century. The approach used to shape the direction of these changes has been a broadly participatory process that involves library and campus stakeholders at all stages of the process and has been driven by data drawn from user surveys, formal and informal focus groups, and the targeted analysis of usage data. As a result, the University of Illinois Library has been able to engage the entire campus community—students, faculty and staff—in a substantive discussion of “what matters” in a 21st century research library while also moving forward expeditiously with large-scale restructuring of our spaces and services. This paper will focus on how user feedback and library metrics helped shape three particular projects: the creation of a new Literatures and Languages Library, the closure of the Biology Library and the move from a physical to a virtual Library and Information Science Library.

**Keywords:** Organizational change, Library assessment, New Service Models

## **iPad: information professionals don’t leave home without it!**

*Ida A. Joiner*

Carnegie Library of Pittsburgh, USA

**Abstract:** As more and more of our library clientele are becoming techno-savvy, librarians and other information professionals must not only keep abreast of the technology in order to assist them but must lead the charge.

The Apple iPad is one of the bestselling computer tablets in the world. Many patrons of all ages own iPad computer tablets and look to the library for technical assistance, downloadable books, videos, music, and other electronic resources for their iPads.

In this workshop, I will discuss how the iPad is a must-have tool for research, multimedia, reading books, magazines, and other resources online, social networking, collaborations, word processing, databases, spreadsheets, presentations, graphics, photography, and other uses for assisting library patrons and other clientele as well as a tool that librarians can use to make their lives and work more productive, fun, and rewarding.

I will discuss and demonstrate real world iPad examples for information professionals and library clientele; how the iPad can be used for research; some of the applications or “killer apps” for information professionals; real world examples; and why as a librarian and information professional, I don’t leave home without my iPad.

**Keywords:** Apple computer, iPad, Information professionals, Librarians, Technology, Techno-savvy, Notebook computers, Computer tablets, Elearning, E-learning, E-books, E-resources

## **It's all about keeping quiet - using focus group interviews to understand the everyday life of researchers in order to support their research**

*Gunilla Wiklund<sup>1</sup>, Hanna Voog<sup>2</sup> and Ann-Sofie Zettergren<sup>3</sup>*

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**Abstract:** Over the last years the interest in research support services at libraries has increased and there are discussions on the contents and design of the support. In the fall 2012, a project was undertaken at LundUniversity with the purpose of identifying areas where the present support services ought to be developed and strengthened. A central idea was that if libraries are to offer relevant research support services they need to understand researchers' needs and wishes in relation to their research and everyday lives as researchers. In order to do so focus group interviews with researchers were chosen as the main method. A schematic model of the research process, from starting a project to communicating the results, was used and in each of the seven focus groups at different faculties, the researchers were asked to discuss how they work in each phase and if they experience obstacles of any kind. The work processes and obstacles were analyzed and possible support services suggested. This paper describes how the method was used as well as advantages and challenges. A major advantage was the shift of focus from the libraries' point of view to the researchers' perspective. For the moderating librarian a challenge was not to interfere in the discussion and yet to see to it that the discussion kept going. A challenge most rewarding in terms of valuable insights into the researchers' experiences, opinions and needs for the future.

## **Job satisfaction of information professionals in Greece during the financial crisis**

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<sup>2</sup>Department of Child Psychiatry, University of AthensMedical School, 'Aghia Sophia' Children's Hospital, Athens, Greece

### **Abstract:**

**Background:** Job satisfaction is critical to life satisfaction, to the quality of employees' working lives, to their performance and organizational commitment. The present recession in Greece has affected the structure of society and created an environment of continuing flux and uncertainty. In this context examining the sources of job satisfaction of information professionals employed in different information organizations is very relevant and of significant importance.

**Objectives:** Using the theory of work values this paper investigates the job satisfaction of information professionals working in academic, special, public, school libraries, archives and organizations characterized as 'emerging job' market.

**Method:** Data was obtained through a questionnaire, distributed to information organizations through mailing list and during a library conference held in Athens in October 2011. A total of 194 participants returned the questionnaire and 186 questionnaires were used in the analysis.

**Results:** The results show that the information professionals were satisfied with their job. Job satisfaction was predicted ( $p < .001$ ) by intrinsic work values, namely the opportunities for learning, expression of creativity, interesting job, autonomy, use of knowledge and abilities, type of performed tasks, appreciation of ideas and adoption of innovative technological developments. Social, prestige and extrinsic work values were not found to significantly predict the job satisfaction of information professionals. The analysis also indicates differences in the sources of Job satisfaction (extrinsic, social and prestige work values) ( $p < .001$ ) among professionals employed in four specific types of information organizations (academic libraries, public libraries, special libraries and state archives) ( $p = .032$ ). Professionals in special libraries were more satisfied with extrinsic work values than those in public libraries ( $p = .032$ ) and state archives ( $p = .004$ ). Professionals working in public libraries were more satisfied with prestige work values than the professionals employed in academic libraries ( $p < .001$ ) and archives ( $p = .034$ ). Finally, it was indicated that the professionals in state archives were less satisfied with social work values than their colleagues in public ( $p = .029$ ) and special libraries ( $p = .032$ ).

**Conclusion:** Intrinsic values have a significant impact on job satisfaction of information professionals. Differences in the satisfaction with the three types of work values (extrinsic, social and prestige) were observed in the four categories of information organizations.

## Journal collection – value for money?

*Anu Eskelinen and Aino Taskinen*

University of Eastern Finland Library, Finland

**Abstract:** In the past few years, Finnish universities have taken place within the major changes. Organizations have been merged and the new University Act came into effect on 1st January 2010. Under the new Act, the universities were given autonomy over decision-making, but also more responsibility for their own financing. At present, about 64% of the university budget is provided by the government and the rest of the financing comes from paid services, donations and sponsoring.

The number of academic degrees and scientific publications is more and more important for university financing. Libraries have a significant role in supporting the publishing activities of the university by developing library services and acquiring resources for teaching and research.

In our article, we want to make a short examination how much doctoral students of the University of Eastern Finland (UEF) have used journals acquired by the library for their dissertations and by this way give an example of how the UEF Library supports academic research by purchasing appropriate material. We also take notice to the acquirement of these journals. For the research material, we have chosen a few

dissertations of each faculty of the University of Eastern Finland published during the year 2012.

**Keywords:** Acquisition, Dissertations, Evaluation, Journals, University financing, University libraries

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## Journals' productivity in the literature on Health Information

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**Abstract:** The purpose of the study was to outline the journals that published articles on the literature of health information and to determine the core productive journals. The study utilizes the LISA database as the main database for the study. The search term used for data removal was "Health Information". A total of 1681 journal articles was realized from 195 journals from 2000-2010. Bradford's law was applied to the data in order to determine the core productive journals. As a result of this exercise, six journals emerged as the core journals. The Health Information literature was found to be in harmony with the Bradford's law of dispersion. The major language for dissemination in the literature was found to be English with (97.4%) score. Followed by French with only (1.2%) score. This indicates that a great number of relevant health information literatures could be reached through the English based journals. Information workers and researchers are hereby notified to consider the six core journals found in this study as part of their relevant sources for research and studies on health information.

**Keywords:** Journal productivity, Literature, Health information, Core journals, Bradford's law

## JUSP: a shared approach to measuring usage

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**Abstract:** The Journal Usage Statistics Portal (JUSP) is now recognised as an essential tool for the management and analysis of e-journal collections for the UK higher education community. From its pilot phase in late 2009, it has grown to include over 150 UK higher education libraries and over 40 journal publishers and intermediaries. Essentially it now offers a national shared service, offering time efficiencies and a

straightforward means of assessing value for money. Funded by Jisc, JUSP provides a single point of access to journal usage data and also offers a number of usage reports developed in conjunction with the library community. By enabling libraries to quickly and easily compare usage across various publishers and years, the automated statistics portal helps these libraries evaluate the value for money they are deriving from their journal subscriptions.

The issues that JUSP deals with are not particular to the UK academic sector and there is considerable interest in the concept of JUSP from individual libraries and library consortia around the world. The JUSP team have collaborated with a variety of organisations outside the UK academic sector to develop or deliver an automated usage statistics service. The French consortium Couperin launched their COUNTER reports website 'MESURE' in late 2012 following support from the JUSP team. Libraries and library consortia outside the UK, and institutions outside the academic sector within the UK are also trialling the JUSP service during 2013.

The presentation will describe work to extend a usage statistics service beyond the UK academic sector to offer benefits on a wider basis. The session will outline the challenges common to individual libraries and library consortia throughout the world in terms of managing usage statistics and the benefits of a centralised and automated service such as JUSP. Community engagement and collaboration have been key to development and the session will describe examples of success in this area. The session will also highlight key issues and lessons learned and the implications for the wider library and information community.

**Keywords:** Journal usage, Statistics, Measurement, Metrics, Value analysis, Cost benefit analysis, Collaboration, Shared services, Interoperability

## **Knowledge and information management behaviour in the light of empirical studies among students\***

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\* This article is a part of the research project No. 2011/03/B/HS2/04436 funded by National Science Centre in Poland.

**Abstract:** The results of empirical studies in the field of *Personal Knowledge and Information Management* (PKIM) will be presented. PKIM is a humanistic and integrated approach of three concepts: Personal Information Management (PIM), Personal Knowledge Management (PKM) and Information Literacy (IL). Following the presentation at QQML 2012 (Limerick, Ireland) of the theoretical basis and the results of the first part of PKIM studies, its second part is described in this paper. The subject of these studies are PKIM behaviour, which is a type of knowledge and information behaviour; and related attitudes, skills and feelings of individuals. Qualitative and quantitative methods were used. The respondents' group consisted of 510 Information Science and Library Studies students from nine universities throughout Poland.

**Keywords:** Information behaviour, Knowledge behaviour, Knowledge management, Information management, Information collection, Information literacy, Students



## **Knowledge and Information Science research in Iran: a content analysis of research strategies and data collection techniques used in the scientific journals**

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**Abstract:** Content analysis of scientific journals is a good way for becoming aware about the evolutionary flow of research strategies and data collection techniques used by researchers in different fields. The purpose of this study is to investigate the content analysis of research strategies and data collection techniques used in Iranian Knowledge and information science Journals during 2005-2009. This study was conducted by content analysis method. The data collection tool was checklist and document observation. The study population included 943 articles published in Iranian Knowledge and Information Science journals. Literature review strategy was the most popular, used by 42.71% of Iranian investigators. The second most popular Iranian research strategy was survey method at 37.63%. Iranian articles were used a few number of other methods such as Field Research (0.20%), Information systems design (0.20%), or experimental research (1/20%). The leading technique was document observation, with about a half of the total (50.44%). The other prominent technique with 25.36% was questionnaire-distributing. These were not surprising, because of the high number of Iranian studies performed with literature review strategy or survey strategy. Experiment (0.48%) and Interview (2.42%) techniques received much less attention in Iran.

**Keywords:** Research strategy, Data collection technique, Knowledge and Information Science, Iran

## **Knowledge mapping and visualization as a common ground between librarianship and scholarly communication: qualitative and quantitative methods for improving semantic categorization and retrieval**

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**Abstract:** Current trends in the field of knowledge organization (KO) and a growing need for promoting scholarly communication are facing LIS professionals with new challenges as well as exciting opportunities. Also academic libraries are urged to reshape their workflows and to focus on innovative technologies, in order to develop value-added services to its users: scholars, researchers and students.

According to such scenario, the Central Library of Università Cattolica del Sacro Cuore in Milan, launched in early 2012 a multi-year project, aimed to improve qualitative and quantitative aspects of semantic categorization and retrieval.

A cross domain ontology, based upon the *Protégé* framework, is currently being developed. When released, the system will provide patrons and staff with a visual interface, common to the three different tools currently used to manage bibliographic information:

- the library automation system (notably the cataloguing module)
- the Online Public Access Catalogue
- the institutional repository, named *PubliCatt*

The main expected benefits are:

- rationalizing and optimizing the cataloguing process
- facilitating and broadening access to all library resources
- making institutional research products more visible and citable

The paper will provide details about the project framework, as well as other notable deliverables, in particular:

- templates
- best practices
- lesson learned

**Keywords:** Scholarly communication, Ontologies, Knowledge organization, Information retrieval, Semantic categorization, Information visualization

## **Knowledge production by librarians in Malaysia for evidence-based librarianship**

***Mohd Faizal Hamzah, Ranita Hisham & Nor Hazidah Awang***

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**Abstract:** Information professional such as librarians do contribute towards knowledge production as an evidence-based librarianship. This paper describes how it is implemented. A study was carried out with the purpose of analyzing the amount of scholarly communication produced by librarians in selected Research Universities in Malaysia. The data was collected using e-survey and it was distributed among the librarians. This study calculates the amount of knowledge production produced by librarians in particular subject area. It also reviews the interest pattern of librarians in information and knowledge sharing. This study focuses on growth patterns, knowledge accumulation, documentary scatter and knowledge production. Analysis was based on statistical analysis, review and general classification of subjects using questionnaires as an instrument of analysis. The results indicate that the amount of scholarly communication produced by librarians is not on par with the other professionals. Generally in Malaysia, knowledge production is still far behind. Number of factors contributes to this issue such as awareness and nature of work. Total of articles indicated from the results shows that only few librarians interested to actively participate in creating knowledge production to support the evidence-based librarianship.

**Keywords:** Knowledge production, Scholarly communication, Librarianship, Evidence-based librarianship

## **Knowledge sharing among academic staff in Nigerian university of agriculture: a survey**

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**Abstract:** The study examined the extent to which academic staff are involved in knowledge sharing for their academic activities. A survey research design was used for the study. Two hundred and sixty seven respondents were randomly selected from the academic staff in the university for the purpose of the study. Questionnaire was used as the main instrument for gathering data. Some of the findings revealed that knowledge sharing assist the academic staff to keep abreast with the up-to-date information particularly in their chosen professions and it was discovered that internet service is the major medium that they use to share their knowledge with the outside world.

It also identified the following major constraints to the use of knowledge sharing among the academic staff: inadequate awareness about the importance of knowledge sharing in academic community and poor attitude of academic staff to ideal of sharing knowledge with one another.

The paper recommended amongst others, the adequate awareness about knowledge sharing and provision of internet facilities in all the academic staff offices.

## **Leadership approaches of university library managers in Turkey**

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**Abstract:** As with all organizations, library managers with leadership qualities are needed in the field of library science. Organizational structures of libraries are constantly changing. Libraries need library leaders who are able to follow the changes and developments and keep pace with them, manage and shape the changes, bring theories and practices together, be solution-oriented, people-oriented, environment-oriented, well-appointed, successful, and creative, because of the rapid developments and continuous changes. In this context, it has become more important for library managers to improve their leadership skills. In the scope of this study, a questionnaire study has been conducted with staff working in 198 different university central libraries. Information form, consisting of 16 questions about librarians' demographic characteristics and manager satisfaction and Multifactor Leadership Questionnaire (MLQ) are used for data accumulation. Purpose of this paper is to determine library managers' leadership approaches in private and public university libraries of Turkey and to survey library staff's satisfaction with their managers.

**Keywords:** Leadership, Satisfaction survey, Library leader, Library manager, University library manager, MLQ

## **Learning and teaching theories, instructional strategy and instructional design for information literacy programs: an IL model for academic libraries**

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Greece

**Abstract:** Information literacy (IL) is world widely acknowledged these days as a set of basic skills every citizen of a modern society should have in order to participate in it and solve problems on personal or professional basis.

Changes in educational thinking, the explosion of digital information and the rapid advancements in technology comprise major challenges academic libraries have to face when it comes to their educational role within the institution they operate.

Academic librarians, as facilitators of the educational procedure, design and deliver IL programs. In most cases they even take up a new role as instructors in these programs, bringing the academic library in center of the institution's educational procedure. This necessitates the acquisition of new skills, besides the ones gained by their typical library training, such as instruction skills, pedagogical skills, educational design skills in order to become effective instructors.

IL is a fundamental element in every step of a person's educational path from elementary school to postgraduate studies. Such programs should promote active thinking and engagement to the students and not passive perception of pre-constructed data and educational material. They should result in a set of skills acquired by actively thinking students which are able to use them not only during their studies but for their whole lives. More than a century, models for the design and provision of IL programs in higher education have been a major discussion topic for many researchers. Several models have been proposed and analysed covering subjects from the adaption of a learning theory up to the design of the educational material.

The proposed model consists of 6 elements aiming not only to describe the educational goals, techniques and material of the program to be applied by any academic library but to also enable the University's students to approach IL as an integrated learning environment.

**Keywords:** Information Literacy, Information Literacy Programs Design Models, Instructional strategy, Instructional design, Learning outcomes, Learning theories, Constructivism

## **Let's create, innovate & motivate before it's too late**

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**Abstract:** Our customers come to us with iPads, Nooks, Kindles, smartphones, laptops, and all the latest and greatest technology gadgets. They want to access information and online resources anywhere, anytime, anyplace, and on any device that they have at their fingertips. As information professionals we must be knowledgeable to help them not only access the resources on their devices, but be able and willing to teach them how to obtain the most relevant, current information and to be able to weed or mine through useless, irrelevant, time consuming information.

Gone are the days when our customers only came into our brick and mortar libraries to request a book. Now they come into our libraries in person or online with their latest and greatest gadgets to download books, music, videos, magazines, games, databases, and other resources. They expect information professionals to be experts on the latest technology, and their devices in particular, and how they can best utilize their devices to obtain information whether from online databases, downloading books, music, videos, games, learning a foreign language, job hunting, house or apartment shopping or any

myriad of services that customers need in their everyday lives. Information professionals need to be knowledgeable in technology, information retrieval, and be able to communicate with them in a friendly, courteous, knowledgeable manner.

In this presentation, I will discuss how information professionals must create solutions and become innovative entrepreneurial information technology gurus or risk becoming obsolete just like the printed card catalogs of yesterday.

I will give real world examples and lessons learned from my illustrious eclectic technology and information career. I will end with a discussion on what the future holds for information professionals to keep abreast of technology advances and how to create innovative solutions for our co-workers and customers to prevent them and us from becoming road kill on the side of the digital technological highway.

We information professionals must lead... innovate... create... and motivate ... before it becomes too late!

**Keywords:** Information professionals, E-learning, E-resources, Technology, Applications, Gadgets, iPad, Kindle, Nook, Laptop, Innovate, Create, Motivate, Libraries

## **Levelling the playing field: a case study in normalizing journal usage data**

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**Abstract:** As academic libraries become more involved in formally supporting and shaping scholarly communications through journal publishing and hosting programs, the ability to provide reliable metrics to journal editors emerges as an imperative. The importance of statistical data is even more pronounced in the case of open access journals, where traditional measures of a journal's uptake, such as the counting of subscribers, are often not available. Government funding programs such as Canada's Aid to Scholarly Journals Program are adjusting their criteria to accommodate electronic journals by looking at metrics such as unique site visitors and geographic distribution of readers. Journal hosting and publishing services must stay nimble to ensure the provision of adequate and accurate statistics data to their stakeholders.

York Digital Journals (YDJ) is an online journal hosting service provided by York University Libraries for York affiliated journals and hosts over 30 titles. YDJ makes use of the Open Journal Systems (OJS) software platform, an open source journal management and publishing system which was developed by the Public Knowledge Project and is widely in use by academic journals worldwide.

YDJ administrators use multiple methods to report statistics. This session focuses on two of these methods: a PHP script that extracts data directly from the YDJ database, and the COUNTER plugin as made available through Open Journal Systems. Despite rapid growth and increased uptake to the hosting service, site-wide article downloads and abstract views have spiked at intervals without logical explanation. Both consistently depicted an overall downtrend from 2007 to 2012.

This presentation describes an attempt on behalf of the authors to investigate and normalize observed discrepancies in journal usage data. It will describe the data analysis and strategy that were used to develop and test a series of scripts to filter and mine the web server access logs. These scripts were tested and refined against the YDJ data as well as other sources to improve accuracy. The identification and analysis of data anomalies and the adjustments made to the scripts to account for these challenges will also be discussed.

Finally, the unparsed YDJ data will be contrasted to the parsed YDJ data, showing a more normalized and expected usage curve. In light of these findings, this session will discuss the implications these variances of data have at a local and more broader scale, and will bring forward recommendations for journal publishers and hosting services charged with collecting and managing statistical usage data.

**Keywords:** Web usage mining, Web robots detection, Web log analysis, Open Journal Systems, Data mining, Electronic journals

## **Librarians leadership styles and subordinates job performance in Federal University Libraries in South West, Nigeria**

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**Abstract:** Some Nigerian university libraries staff performances were observed to on the wane and the style of leadership style adopted by librarians not quite defined. The study examined the leadership styles of librarians and the job performance of subordinates at federal university libraries in South West, Nigeria. The objective of the study was to determine the leadership styles of librarians, specifically the predominant style adopted, the pattern of adoption by acquired knowledge, length of service and gender of the adopted style(s); the level of librarians leadership style influence on job performance of subordinates, the pattern of influence by gender, length of service and status of the subordinates; and to examine the level autocratic, participative (democratic) and delegative (laissez faire) leadership styles influence on job performance of subordinates. Ten (10) research questions were raised and hypotheses were postulated in line with the questions. A population of 147 respondents (30 librarians and 117 subordinates) from 5 Federal university libraries in Nigeria were involved. The subordinates consisted of 44 Library Officers and 73 Library Assistants. Two instruments were adapted, modified, validated, and used on the respondents: Librarian Leadership Styles Questionnaire was used on the librarians (leaders) and Job Performance Characteristics Questionnaire was used on the subordinates. The responses of the respondents were collated, analysed, and presented by use of frequency and percentage tables, charts and models. The hypothesis were tested and presented with t-test, and one way analyses of variance tables as appropriate. The result of the study showed that, librarians adopted autocratic, participative and delegation leadership styles in their administration. It further showed that, there was no significant difference among librarians on leadership style adopted. The study indicated that management training background and length of service or gender were not strong factors to choice of leadership styles by librarians. The leadership styles of librarians in the university libraries strongly influenced the job performance of their subordinates. Factors such as gender, length of service and cadre are not significant in influence of their job performance. However, more attention need be paid to such performance areas like financial management, creativity, team work and cooperation, judgments, initiative and service.

# **Librarianship and scientometrics: support or surveillance in the research publication process**

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**Abstract:** During the last few decades, there have been substantial changes in scholarly communication and publication processes (Borgman 2007), in research evaluation and science policy processes (Whitley and Gläser 2007), as well as in academic librarianship and library and information science research (Nolin and Åström 2010, Schreiber and Elbeshausen 2006). These changes are in many ways interconnected: quantitative analyses of academic publishing are increasingly used for evaluating research; and academic libraries have become an important actor in open access publishing. Another point of interconnectedness is the establishment of bibliometric activities at academic libraries (Ball and Tunger 2006, Gumpenberger et al. 2012): activities ranging from providing the local research community with information on bibliometrics based systems for research evaluation, to performing publication and citation analyses for performance evaluation of e.g. academic departments as background information for decisions on the distribution of research funds. The purpose of this study is to discuss reasons for developing bibliometric activities; and some potential consequences of implementing bibliometrics as an institutionalized practice in academic libraries. The discussions are based on previous literature discussing bibliometrics at academic libraries, as well as a questionnaire on bibliometric activities at Swedish academic libraries.

**Keywords:** Profession, Role of libraries/librarianship, Academic libraries, Scientometrics, Research evaluation

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# **Libraries Accessibility Project: realities and challenges at 15 Lisbon municipality libraries**

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**Abstract:** The “Libraries Accessibility Project” was developed between September and December 2012 and used a qualitative approach to identify the physical, communicational, equipment and personalised assistance accessibility conditions and characteristics at 15 libraries in the municipality of Lisbon, Portugal. The main objectives of the project team were: a) creating opportunities for improving the built environment; b) disseminating the existing conditions in the libraries, informing the public about the available different accessibility conditions, therefore contributing to the full enjoyment of the spaces analysed; c) distinguishing good practices aiming at coordinating efforts for a larger receptiveness of librarians and library directors in what refers to the accessibility theme.

The collection of data was done through a questionnaire to all 15 libraries’ directors, by local observation, with an evaluation grid completed while visiting the libraries, and by collecting library user’s opinion about the existing library accessibility conditions.

The triangulation of all the data collected indicates that the accessibility conditions are still not in place in most of the Lisbon municipality libraries visited and analysed. It emerged that the physical domain is the first concern in the building rehabilitation plans, often forgetting the communicational and the equipment domain. This reality compromises the autonomous and free library use by everyone but it must be stressed that in order to overcome most of the obstacles it was noticed a strong staff commitment to assist and help people with different kinds and degrees of functionality (disabled, elderly, pregnant or with little children).

**Keywords:** Accessibility, Libraries, Portugal

## **Libraries’ benefits in the light of statistics and survey data**

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**Abstract:** How to show the benefits of libraries from different user groups’ point of view? How to demonstrate libraries’ role in supporting research and study achievement, or free access to information? How to assess the success of their development measures? These questions are discussed in this paper from a statistical, as well as a customer-oriented point of view. Three different data sources are utilized: the Finnish Research Library Statistics Database, the Finnish Public Library Statistics, and the national user survey of Finnish libraries. The statistical information and customer experiences regarding e.g. IL tuition, reference services and electronic resources are explored by analysing and comparing these data sets. In addition, a comparative analysis on experienced impact is made between different user groups. Besides presenting the results, the aim of this paper is to demonstrate how different data types can complement each other and provide a stronger evidence of value of libraries. Also cases in which statistics and survey results may give a different picture of libraries performance are adduced.

**Keywords:** User survey, Statistics, Impact evaluation, Impact assessment, Library customers, Public libraries, Research libraries, Finland



## **Libraries: a tool for economic co-operation and development of Nigerian States**

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**Abstract:** Nearly a billion people in the world entered the twenty first century unable to read a book and write their names. Most of these illiterate people are found in sub-Sahara Africa, particularly Nigeria. As a result of this, ethnic-religious, political and economic crisis are the most intractable problems ravaging Nigerian State today. Because of this, there is breakdown of law, loss of properties, and collapse of government authority in some states of the federation. This has led to increase in military expenditure to maintain peace and security, thereby diverting scarce resources for investment in social development.

Education has proven to be a veritable instrument for wealth creation, peace, sustainable economic cooperation and development, it is a creative tool that can be used to develop and liberate man from oppressive forces of nature. Libraries on the other hand are at the center of education business and a powerful tool for teaching, learning and frontline research. The libraries are the key indicator of the educational health of any nation. The essence of this research work is to examine some roles the libraries can play in sustainable economic cooperation and development of Nigerian States through inculcation of reading habits among Nigerian youths, ensuring effective and efficient collections, management and utilization of library and information resources necessary for academic enterprises.

## **Libraries as sources of investigation for the history of Romanian illustrated press at the beginning of XXth century**

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**Abstract:** By the moment the Romanian illustrated press established its own firm frames at the beginning of the XXth century the European illustrated press had already a long history. From the first illustrated magazines, Penny Magazine (1832) or Magasin pittoresque (1833), to name just two of them, they shaped a new way of watching the world. The image started to play a more significant role and also grew the dimensions of the images within the paper pages. The technological discoveries and printing technologies improvements allowed the reproductions of photographs in press. Illustrated press became more reachable to the common reader and the huge presence of images influenced the perception of the public over the events depicted. With a delay of a few decades the illustrated press started to play its role in Romania too. The war of Independence (1877-1878) was the moment when two illustrated newspapers, *Resboiul* and *Dorobanțul*, presented to the public the figures of the main actors of war and the

most important the figures of the Romanian soldiers who fought and died for the independence. In the last two decades of the XIXth century the desire to align to the European evolution of the illustrated press determined a constant and fruitful competition among the Romanian journalists. The illustrated press became more specialized from daily press with images, *Universul* with his many supplements to to deluxe quality paper, *Ilustratiunea Româna* covering the cultural and social life. Little known, even in Romania, the illustrated papers lay hidden in libraries.

The purpose of this paper is to present a general overview of the Romanian illustrated press at the beginning of the XXth century with examples taken from Romanian libraries.

## **Libraries between competence development and new professional roles**

*Ljiljana Sabljak<sup>1</sup>, Dunja Marija Gabriel<sup>2</sup>*

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**Abstract:** We are going to make a presentation of how public libraries in Croatia, have the challenge of reaching out to serve all people in their community and make libraries socially inclusive to all category of users.

Zagreb City Libraries are conducting programs intended for a social inclusion of senior citizens „65 plus“, „The Library wide open doors“, with the goals to promote reading and life long learning and social inclusion of children with development handicaps and youth with disabilities, than „World in Zagreb“, program of exhibitions and cultural events for children and adults, like a result of co-operation with cultural institutions and foreign embassies which aims to introduce other cultures and traditions to the citizens of Zagreb. Nowadays librarians are witness tremendous changes in the public library sector. We see a globalisation of the information culture, and our answer is project „Digitized Zagreb's Heritage“, with the intention to preserve, protect and valorise Zagreb's cultural heritage, as well as to provide public access to documents which represent precious sources for studying social and cultural life of the City. The material have been chosen and digitized of rare materials of the Zagreb City Libraries' Collections – Local History Collection Zagrabiensia, Musical Department and Croatian Centre for children Books.

We conducting the national projects; Month of the Croatian Book, traditional manifestation which take part mostly in the public libraries in the Republic of Croatia, than the national project „Ask Librarians – online references, providing free and equal access to high-quality information for all citizens, stressing the individual citizen's right to information.

This is just a selection of the most important tasks, different programmes and projects Zagreb City Libraries responded to the challenge of the electronic revolution and have taken the opportunity to develop services in new and exciting ways.

## **Library-based learning to help primary school students develop information literacy skills**

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**Abstract:** This longitudinal study starting from 2008 to 2012 after the Community Library Project of Srinakharinwirot University which was aimed at developing a school library and promoting reading activities for young children at BaanSaliengThongPrimary School in Chaiyaphum, a rural province in northeastern Thailand. Its purposes were to (a) to examine the students' attitudes toward reading and library-based learning, and (b) to determine the development of information literacy skills of the students since the school library was established in 2008. This study employed a mixed-methods research design with 120 primary school students. In addition, field data collection was conducted each year in 2008 through 2012. Quantitative and qualitative results showed that (a) the students' attitudes toward reading and library-based learning are positive since students thought that the books and learning materials are interesting and can help them improve the ability to read and would like to continue using the library, and (b) the development of information literacy skills of the students from the establishment of school library in 2008 to 2010 increased.

## **Library and science indicators: towards a new paradigm to assess the library and information services as an input to the academic processes**

*Carla Basili<sup>1</sup>, Markku Laitinen<sup>2</sup> and Jarmo Saarti<sup>3</sup>*

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**Abstract:** During the past few decades, the university libraries have changed their paradigm from offering collection-based services towards promoting access and digital use of scientific resources. At the same time, the quality assessment of the university research became integrated into academia. One basic assumption in this paper is that the scholarly communication process is inherently intertwined with research and development (R&D) activities and thus the measurement of their success should also involve an assessment of the contribution of the library. The aim of the paper, therefore, is to describe the up-to-date statistical standards and indicators for both libraries and higher education institutions, emphasizing the need for integration and/or their correlation. In addition, some proposals are made about how to improve co-operation between the library and R&D-processes.

## **Library automation: a case study of NPL-KRC**

*Abhishek Sharma, Abhishek Yadav, Ashish Ranjan,  
and N.K. Wadhwa*

CSIR-National Physical Laboratory, India

**Abstract:** In today's competitive world, automation is at the forefront when demand comes to streamline operations in any industry. Automation has also gained a foothold in libraries. A case study of the automation of National Physical Laboratory (NPL) - Knowledge Resource Centre (KRC) that would offer an Information System to researchers of NPL in retrieving the available information sources has been detailed in the present communication. The paper will showcase the strategy adopted in selecting the suitable software, and outlines the challenges faced by the KRC in the initial phase of the process along with the measures taken to conquer those challenges. In this paper, experiences up to the software installation phase will be shared by the authors.

**Keywords:** Automation, Library automation, Library software, Information system, Library technology

## **Library cooperation and service delivery: process progress and challenges in private universities in Nigeria**

*Dr. Emmanuel 'Layi Adebayo*

Redeemer's University, Nigeria

**Abstract:** Library cooperation (LC) stems out of the fact that no library can be self sufficient in terms of funding and resources available for service delivery. Funding level could affect library collection, staffing, facilities, equipment and even buildings which are all areas where the impact of library cooperation could be visible. The level of resources including funding available to Nigerian universities especially the privately owned makes library cooperation an issue for consideration. Resources to meet vital requirements in some of the institutions are not available and the library is always considered as a minor when allocating resources, this further softens the ground for venturing into Library Cooperation. This paper which studied ten (10) private universities in Southwest Nigeria highlights the areas of Library Cooperation among universities, the process, the progress and the challenges. It concluded that libraries or it was in embryonic stage.

**Keywords:** Library cooperation, Library facilities, Private universities

## **Library evaluation, with example of the Library of Belgrade Polytechnic, according to International Standard ISO 11620 : 2005**

*Mirjana Nesic*

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**Abstract:** This paper deals with the concept of library evaluation, with reference to its history and methods. It is an attempt to clarify and expound the main purpose and benefit of evaluation and it is a try to emphasize its worth and necessity. It is also about the control system, as an important phase of management, and the attempts to systematize criteria for library performance evaluation, through history. This paper also examines distinctions between quantitative and qualitative parameters and subjective and objective approaches in evaluation. The second part is about coordination of the library performance of Belgrade Polytechnic with International standard ISO 11620:2005.

**Keywords:** Evaluation, Library, Quality, Standards, Control, ISO 11620

## **Library focus groups: seven unique techniques to promote participants discussion and interaction**

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**Abstract:** Focus group researchers have developed a number of alternative strategies to help stimulate discussion in the group environment. The generation of verbal exchanges among group members is vital to the production of useful qualitative data. The approaches considered in this abstract may be used in a stand-alone capacity or combined with the traditional focus group format. The techniques to be considered are presented in the approximate frequency of citation in the focus group literature, and include vignettes, role playing, storytelling, drawing, repeat receipts, poetic transcription, and concept boards. Foremost among the techniques are vignettes, hypothetical cases or presentations to which the group members are asked to consider what should follow. The vignette technique has been used to determine end-users perspectives toward new products and services. In role playing, participants portray the persona of someone else or as part of a situation of interest to the researcher. This approach has been shown to enhance group commentary and interaction. Storytelling involves the sharing of stories in a turn-taking, interactive mode. Otherwise reluctant participants can be encouraged to share personal information in the group environment. Picture drawing is an alternative way to access information about thoughts and experiences, and is particularly effective with children and young people. Repeat receipts is a technique in which the moderator repeats aloud short portions of what has been stated by participants. This emphasizes key descriptive terms and excludes other aspects of the communication. A rare approach is poetic transcription, which involves converting texts from transcribed focus group discussions into poetic form. The key ideas and perceptions presented in poetic phraseology are then read to subsequent focus groups for comment. The final technique considered is the use of concept boards, which include either text or images or both. Essentially this is the use of props either prepared or generated as part of the focus group discussion. Other discussion enhancement techniques include listing exercises (perhaps using flip charts or chalkboards); rating scales and ranking activities; picture and photograph sorting; visual aids including newspaper clippings, cartoons, and videos; conceptual and perceptual mapping exercises; collage assembly; and imagery, fantasy, and daydream activities. Librarians might consider incorporating one or more of these techniques into traditional focus groups in order to generate greater interaction among the participants.

## **Library instruction within a discipline context: expectations and adaptations**

*Laura Saunders*

Simmons College, USA

**Abstract:** Each discipline and field has its own research paradigms, preferred methods of inquiry, as well as specific methods for creating, disseminating, and evaluating information. Faculty are enculturated into their disciplines and the values, habits, and priorities of the discipline area often guide the behaviors and interactions of faculty members even outside of their work. To what extent do librarians acknowledge and adapt to discipline-area differences when engaging in library instruction? How do they vary focus and content of library instruction to address discipline-area differences? This session will report on the results of two complementary studies. The first included a nation-wide survey and follow-up interviews of teaching faculty on their attitudes and perspectives on information literacy within their disciplines. The second study involved a second nation-wide survey investigating instruction librarians' perspectives on how the culture of the disciplines they support influences their teaching, including whether and how they adapt their teaching content and methods to align with the disciplines.

**Keywords:** Information Literacy, Library instruction, Discipline, Faculty, Academic libraries

## **Library partnerships: cooperating for the future**

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<sup>2</sup>Vera Bracken Library, Medicine Hat College, Alberta, Canada

**Abstract:** In times of budget cuts and belt-tightening across campuses and communities, when the demand for fiscal conservatism abounds, publicly funded entities experience increased pressure to demonstrate value and effective use of resources. There is greater scrutiny of programs, services, and collections; questions are asked about efficiency, economy, and necessity. For libraries wanting to sustain and perhaps enhance services, cooperating with other libraries through the development of formal or informal partnerships is a possible solution.

A mixed methods study of academic libraries conducted in 2011 looked at partnerships between academic and public libraries in Canada. Uncovered in the course of the study was a unique series of partnerships between a college library, a public library, a regional library system, and a school district library system in a small Canadian city. With little or no additional funding, these four libraries have partnered to deliver library services beneficial to both their primary clients and the broader community. Based on interviews with key participants in the case study, this session uses programs and services established and/or sustained through the partnerships to demonstrate the key elements of a successful partnership, as determined in the 2011 study, and to surface the role organizational culture plays in cooperative ventures.

**Keywords:** Cooperation, Partnerships, Organizational culture

## **Library statistics with confidence: facts from figures with no fear**

*Markku Laitinen*

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**Abstract:** Libraries collect a lot of statistical and other data about their operations but often a greater part of the information collected is not utilized as effectively as it would be feasible. However, the use of simple basic statistics is often all that is needed to show the value and impact of the library. The methods of reporting and measuring the library services offered to the libraries may be given “up to down” instead of balancing the methods with above-mentioned and “bottom up” idea that serves the local needs of the libraries. The libraries need support in the use of statistics and therefore it is necessary to organize training sessions of the use of collected data for them. The aim of this paper is to provoke discussion on the field of library statistics and to encourage the librarians to use the data collected. Further, the aim of this paper is to give an idea of training the libraries to combine data from different sources to refine it in order to take the lid of phenomena possibly not recognized earlier in the library and to use the data in an illustrative way to advocate for the library by showing the evidence of impact.

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## Linguistic storm: an essential information retrieval tool to update researchers

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**Abstract:** Shows linguistic storm's utility and efficiency through controlled vocabulary matrices. A controlled vocabulary matrix construction is described and the obtained results from different academic and commercial information systems. The obtained results indicate the semantic universe that researcher must consider to confirm, modify or change their research papers and trends.

**Keywords:** Information Retrieval, IR, Controlled vocabulary, Natural language Information Systems, Linguistics, Lingstorm, Semantics, Infopragmatics, Pragmatics

## A linked data driven approach on cross language information retrieval to diverse Japanese databases

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**Abstract:** This paper proposes a method in providing integrated multilingual access to diverse digital libraries, archives, and museums of Japanese arts and culture, which generates links across databases using Linked Data and authority data. The name authorities and subject headings of the National Diet Library (NDL) of Japan and Virtual International Authority File (VIAF) are used as authority data for searching name authorities, subject headings and related Linked Data resources in Japanese and in a variety of languages of western countries.

Any proper noun written in Japanese could be searched from the NDL authorities for knowing its proper reading and then will be romanized as romaji, which should be sent as a search keyword to the VIAF for obtaining notations in various languages. Databases in different languages could be accessed using the notations in authority data. By utilizing Linked Data along with authority data, users would be able to access to additional data about a certain record in not only Japanese databases but also multilingual databases in other countries without depending on languages and formats of each database.

A prototype system, which is able: 1) to access multiple databases in parallel through a single interface and a single query, 2) to link heterogeneous databases in different languages, 3) to search and browse Japanese databases using English queries, and 4) to aggregate, integrate and display the retrieved results in a single interface instantaneously has been developed.

**Keywords:** Linked Data, Japanese databases, Authority data, Information access

## **LIS education in India: a quantitative and qualitative approach**

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**Abstract:** In the current age of digitized information, e-resources and networks has created a new demand for proficiencies, skills and capabilities in Library and Information Science (LIS) education. The Library and Information Science professionals are in dire need to acquire the relevant skills and expertise to track the world of information and become competent enough to provide best services to users. In India, out of 369 universities, 120 universities are offering Bachelor of Library and Information Science (BLIS) degree, 78 are offering Bachelor of Library and Information Science (BLIS) and Master of Library and Information Science (MLIS) degrees, 21 are offering two year integrated course, 16 universities are offering Master of Philosophy (M Phil) degree and 63 are offering Doctorate of Philosophy (PhD) degree. In addition to these universities, National Institute of Science Communication and Information Resources (NISCAIR), a laboratory of CSIR, New Delhi and Documentation Research and Training Centre (DRTC) Bangalore are also offering two-year associate ship course in Library and Information Science, which are recognized as equivalent to Master Degree in Library Science (MLIS). In India, about 22 universities are offering LIS education through distance learning mode. Out of 22, 17 distance education institutions are providing



Bachelor of Library and Information Science degree, 8 are providing Master Degree in Library Science degree, 3 Diploma Courses and 6 are providing certificate level courses in Library and Information Science discipline. Four universities in India were offering M.Phil degree courses through distance learning mode till 2009. The year 2009 was the last registration year for M.Phil degree through distance learning programme. This paper offers an overview of qualitative and quantitative contents of the syllabus of various academic and non-academic organizations involved in to provide LIS education through regular courses, distance courses, short term courses and training programs for capacity building of library and information science professionals. The author covers various types of non-academic organizations involved to award LIS education in India

**Keywords:** LIS education, India, LIS courses, LIS Professional Association

## **Living in the digitization wonderland! How to cooperate on the digitization activities and make the costs effective**

*Tomas Foltyn*

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Czech Republic

**Abstract:** Czech Republic is getting to be a digitization wonderland. Comparing the size of the country, population and the number of digitized pages, the rate will be amazing. In the frame of the National Digital Library project, which is the leading activity in mass digitization of modern collections, more than 120 000 volumes and 26 000 000 pages will be digitized till the end of 2014. Besides this project National Library of Czech Republic signed the contract with Google for the old books digitization. Within this PPP project more than 200 000 documents will be scanned and present, what means additional several millions pages. In the main regional cities the new regional digitization units were established under the EC funding. The aim of these units is to scan the documents coming from hospitals, regional governments and other institutions and of course – libraries. 60 000 volumes and 11 000 000 pages are total estimated numbers. Parallel with these large digitization projects many smaller projects designated for the area of the Czech public libraries are running. By the Public Information Services in Libraries program funded by the Ministry of Culture more 4 000 volumes and almost 1 000 000 pages are digitized every year. Of course there is an internal digitization in institutions as well. If you summarize the above mentioned numbers with the existing amount of 13 000 000 pages you get incredible result and ratio. But numbers cannot cover the basic questions – how to keep the data unique, how to avoid unwanted duplicities, how to economize financial resources, how to present the content and aggregate it for international services or how to standardize the metadata and preserve them. The leading persons of the biggest Czech libraries, together with the experts from other institutions have prepared a few projects, which aim was to solve the mentioned issues. Based on these projects and obtained funding special solutions as Czech Digital Library, Digitization Registry or Digital Library Kramerius were established and deployed into everyday real life. Together with the development new standards for digitization were established and proclaimed as obligatory and important issues were subordinate to expert working groups. Were digitization experts successful and have reached the digitization wonderland or are they lost in digitization nightmare will be described in the presentation.

## Log analysis of user queries: identifying candidates for the new subject headings

*Kristýna Busch and Eliška Veselá and Lenka Šatavová*

National Czech Library, Czech Republic

**Abstract:** This paper describes how the National Technical Library of Prague carried out a Web server transaction log analysis in order to identify possible candidates for the new subject headings in the Polythematic Structured Subject Heading System (PSH). PSH is a bilingual Czech–English controlled vocabulary of subject headings which is used for organizing and searching the documents by subject. PSH contains over 13 900 subject headings. The problem is that the language used in the subject heading system created by professionals may differ from the one used by end-users when searching various documents. Bringing both of the languages into the content of the subject heading system may enhance subject access to the National Technical Library's materials and help users reach better results.

**Keywords:** Log analysis, End-user behavior, Controlled vocabulary, Subject headings, Polythematic Structured Subject Heading System

## Major scientific digital repositories in India: an analytical study

*Naushad Ali P.M. and Jafar Iqbal*

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**Abstract:** In the recent years much discussions and initiatives are taken in the area of open access. Universities and research centers throughout the world are actively planning and implementing digital repositories to enhance the dissemination of their research outputs. At present, a number of Indian institutions have shown their support for open access by planning and implementing digital repositories for wide dissemination of scholarly materials. The present study aimed to identify various digital repository initiatives taken by Indian institutions and made an attempt to evaluate them. The study identifies around twenty five digital repositories out of fifty five functional repositories in India using the *Registry of Open Access Repositories* (ROAR-<http://roar.eprints.org/>) and the *Directory of Open Access Repositories* (OpenDOAR-<http://www.opendoar.org/>). For this study only top five Indian digital repositories i.e. Digital Repository Service of **National Institute of Oceanography**, Dona Paula, Goa, Open Access Theses Repository of National Institute of Technology, Rourkela, Open Access Repository of Publications of Fellows of the Indian Academy of Sciences, Bangalore, Open Access Repository of IISc Research Publications, Bangalore, and Open Access Institutional Repository of **Central Marine Fisheries Research Institute**, Kochi were selected which are listed in "The Ranking Web of World Repositories" prepared in 2013 by Cybermetrics Lab, a research group belonging to the Consejo Superior de Investigaciones Científicas (CSIC), the largest public research body in Spain. To evaluate

the selected Institutional Repositories, the following criteria has been designed: **i)** organization **ii)** software **iii)** authority **iv)** coverage & contents **v)** purpose **vi)** scope **vii)** currency **viii)** metadata standards **ix)** search tools **x)** hypertext links **xi)** user friendliness **xii)** special features. The results of the study show, majority of selected institutions established their digital repositories using EPrints followed by Dspace open source digital repository software, the various types of available contents in digital repositories are doctoral thesis, master's thesis, technical reports/papers, journal articles, conference proceedings/reports, preprints newspaper clippings/articles and Dublin Core Metadata Standard is being used to describe digital documents of the repository by majority of the institutions. An attempt also been made to provide necessary suggestions for improving access to existing IR in the country.

**Keywords:** Open access, Open source software, Digital repository, Analytical study, India

## **Managing the design and delivery of a new 20 million euro library building: why excellence and innovation matter**

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**Abstract:** The National University of Ireland Maynooth opened its doors to a new library building on December 3<sup>rd</sup> 2012. This building cost 20 million euros and was a major investment for the University. It increased library space on campus by 250% and increased seating capacity by 216% to almost 1500. Furthermore, it became the building with the largest concentration of PCs on campus. It is expected that our book capacity will increase by 130%. Of great significance is that it caters for seven different learning styles including social, collaborative, silent and individual.

Six months since opening, this paper will review the innovative planning that went into delivering this building. This paper will highlight the management experience of two Senior Librarians who were heavily involved in managing this project. Included in our paper is the following:

- Research methods used to gather data from library users in advance of the planning process
- Metrics currently being used to assess the impact of the new library on campus
- Library Management Strategy used to implement an Organisational Review to better align our staff structures with the opportunities afforded by the new library building
- Advice on how we incorporated the latest innovations in library design, flexible learning spaces and information technology in the building design
- Experiences of how we commissioned and continue to commission a project of this size and the ensuing challenges
- Recommendations from our innovative use of social media to communicate with our library users throughout this project

This presentation will provide visual aids including a short video designed by our architect in the planning stages and also pictures of the building in use. These will further highlight the innovative practices taking place in the building.

## **Mapping transliteracy**

*Dr. Suzana Sukovic*

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**Abstract:** Although information literacy has been recognised as one of key skill sets, high school students rarely become information literate in a systematic way. In Australia, information literacy is not explicitly integrated in curricula. Like in many other parts of the world, the development of information skills depends on individual teachers and their departments. At the same time, distinction between information, digital and media skills, and their relationship to the curricula is far from clear.

This paper proposes transliteracy as a framework for considering a range of related skills and suggests a model for integrating transliteracy in the curriculum. It outlines an initiative to systematically develop students' transliteracy in an independent high school in Sydney. The process has been ignited by preparations for the first phase of the new Australian Curriculum, which will gradually replace existing state-based curricula. The process of curriculum mapping and integration of transliteracy is led by the College library, which has already explored some innovative ways of developing transliteracy skills through project and scenario based learning. Insights from these explorations will be discussed in the presentation.

## **Marketing and promotion of library services in Nigerian academic libraries: a challenge to Information Professionals**

*Samaila Adamu Dangani*

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**Abstract:** Academic Libraries in Nigeria have been considered essential to educational and research endeavours and have relied on institutional (parent organization) financial support for their continuing operations. The value of the library is also being called into question with increasing "googleisation" and new generations of users are making new demands on Library Service Provision. University librarians are competing with multiple demands for funding on their Libraries. They must understand client needs, plan service provision, promote the available services, deliver them efficiently and effectively and fight for financial and other support. Marketing has become an essential tool in justifying fund requirements. Using various market research techniques including surveys, focus

groups and analysis of suggestions, libraries can understand the needs and design appropriate services and facilities. As librarians we should be actively marketing and promoting our library services. This paper aims to demystify marketing and promotion of library services in Nigerian academic libraries. A critical and extensive discussion has been provided on the situation of Nigerian academic libraries, how to effectively and efficiently market the library and information services and its challenges to information professionals as well as the way forward.

**Keywords:** Marketing, Nigeria, Academic libraries, Marketing library services

## **Marketing of library and information services: an action plan**

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**Abstract:** This paper deals with the marketing of library and information services in the global era. It discusses about the marketing concept of today's library and information centers covering various topics such as management of libraries and commitment to customer's satisfaction. It also defines the marketing and its current approach to library and information services at the global level. It also describes customer/user's topic such as customers' priorities, customers' expectations, individuality responsiveness, relationships, quality of services, professional skills and competencies and value added services. The 5 Ps of marketing mix, i.e. product, pricing, place, promotion and person (staff) have been discussed. The marketing should aim at effective library and information services. The "service trinity", i.e. users (customers), the staff (service provider) and information resources and system should be taken care of from the view of these services. In the modern age, the library and information services (LIS) are customer (user) oriented. Therefore, users' priorities, expectations and needs should be taken into account. The services should be value added according to the current requirement of the users. It is concluded that the modern libraries are information markets and the library users are consumers of information. The ultimate objective of the marketing of library and information services should be the dissemination of the right information to the right customer (user) at the right time.

**Keywords:** Library services, Information services, Marketing, Market, Management

## **Measuring and sustaining the impact of multilingual collections in a research library**

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**Abstract:** At the start of the 20<sup>th</sup> Century, University President Edmund James set forth a vision of a million-volume library at the University of Illinois, a library that would attract pre-eminent scholars to the middle of the American prairie. Now, approximately 100 years later, the institution's collection numbers over 15-million volumes and has grown with a service program to be a vibrant and robust set of operations that serve local and international scholars. As of 2013, the University Library supports three nationally funded resource centers that focus on various world regions, which in turn support over 800 members of university faculty and various programs and services associated with the centers. The Library's contributions toward cooperative collection development and resource sharing partnerships allow researchers from around the world to have unprecedented access to its multilingual collections and services. By collecting materials that are scarce in the US in the vernacular languages of Eurasia, Africa, Latin America, the Middle East, East and South Asia, the UIUC Library has become a reliable destination for scholarly communication and information delivery. By coupling strong collection development activities in Slavic and East European languages with a robust service component as manifest in the Slavic Reference Service, the Library has emerged as a national hub for providing scholars with access to resources located at Illinois and other institutions.

In order to examine the current state of resource sharing and cooperative collection development, this proposed paper will evaluate the symbiotic relationship between multilingual collections and ILL services by conducting a quantitative analysis of ILL transactions for materials in languages considered less commonly taught in North America (as identified by the National Council of Less Commonly Taught Languages: <http://www.ncolctl.org/>). The study will examine multiple years of UIUC resource sharing and collection usage data. Moreover, the proposed paper will also provide a historical narrative for multilingual collections, collection development strategies, reference services, and outreach initiatives, which reinforce and strengthen scholarly communication in resource sharing among academic libraries. Lastly, the proposed panel will address the importance of maintaining area multilingual collections to meet the expectations of the global generation.

**Keywords:** Resource sharing, Cooperative collection development, Interlibrary loan

## **Measuring customer satisfaction – Over time and in global benchmarks**

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**Abstract:** In a new research approach, the German National Library of Science and Technology, TIB, together with the market research organisation TNS Infratest, measured customer satisfaction in one figure as well as in terms of service quality offered. Even if offers of libraries are quickly changing, the dedicated TNS methodology applied allows

comparisons over time and enables scientific libraries to measure, monitor and manage service quality from year to year. The unique tools used allow international cross-comparisons among libraries and allow us to judge the TIB results compared to other leading scientific libraries.

We will showcase how customer satisfaction can be efficiently directed & designed to developing services assuring high customer retention.

**Keywords:** Customer satisfaction, Market research, Global benchmarks, Balanced scorecard

## **Measuring digital divide in higher education: a study based on Alexa ranking of the central universities of Delhi and up**

*Dr. Amjad Ali*

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**Abstract:** The last few decades have witnessed an extensive research on the impact of Information and Communication Technologies (ICTs) on society. Being a vital organ of the society, the institutions of higher education are no exception. The new researches aim at assessing the discrepancies between the people who have access to the resources to use the new information and communication tools and those who do not have such opportunities to do so. It results in a digital divide. This study has been carried out on the central universities of India located in similar social conditions but in different ICT environments. The study is based on the traffic ranking using the Alexa Internet. Data for the study was collected on global as well as national ranks of the universities. The information on Linking In sites has also been presented to reflect the pattern of ranking. Results have been drawn on the basis of the data so retrieved and analyzed. The study concludes that the universities located in better ICT environment have higher ranking compared with the others located in the other places. It is suggested to strengthen the ICT infrastructure specially the Internet facility to the educational institutions located in smaller cities of the country for better results.

**Keywords:** Digital divide, Information and Communication Technologies, Alexa Ranking, Indian universities: University ranking, Higher education

## **Measuring impact: considering qualitative and quantitative feedback from human library books and readers**

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**Abstract:** The human library is becoming a more popular programming element of public and academic libraries all over the world and at an impressive rate. The Augustana Campus Library, seeing the human library as a great opportunity for Human Books to share their experience of lived prejudice and/or stereotypes with Readers with the hope of having Readers better understand the struggles of others, has offered more human library events to its campus than any other Canadian academic library. Each academic term a human library is offered at the library and Readers are given pre- and post-“read” questionnaires which aim to gauge the impact of the human library on their perception of an issue and its associated prejudices and stereotypes. Similarly, Human Books are given pre- and post- “event” questionnaires which aim to ascertain the person’s experience of being a “Human Book”. The questionnaires include qualitative and quantitative questions and pre- and post- responses for both Human Books and Readers are compared to get an indication of the change in attitude or understanding as a direct result of the human library experience.

The human library is a creative outreach opportunity for the academic library. It can engage the students, staff and faculty of the campus as well as members of the community. Any of these campus or community individuals can be Human Books and/or Readers providing for a different kind of learning experience than the typical classroom context while also bridging the campus and the community. Reviewing the responses of all participants to the qualitative and quantitative questions provides insight into the contribution of the human library to the university library and campus.

**Keywords:** Augustana, Human library, Information Literacy, Assessment

## **Measuring research output of member universities of the UGC-INFONET Digital Library Consortium and its impact: a comparative study**

*Kruti Trivedi and Jagdish Arora*

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**Abstract:** Access to print as well as electronic resources is known to make a qualitative difference to research, learning, staff development, scholarly and R & D activities of an institute. It is evident that research productivity of universities beneficiary of access to e-resources through consortium initiatives has increased significantly. The UGC-INFONET Digital Library Consortium provides access to scholarly electronic resources across various subject disciplines to more than 200 Indian universities for past nine years. The article briefly describes this programme and examines its impact on research output of first 50 universities that are benefitting from this programme since its inception in 2004. The research output data for 50 universities, covered in this study, is taken from three citation indices, namely Science Citation Index (SCI), Social Science Citation Index (SSCI) and Arts and Humanities Citation Index (A&HCI) hosted on Web of Knowledge platform, to measure their research output and its impact.

**Research Output:** The data on research output of universities in terms of number of research articles published by faculty and researchers working in these 50 universities is taken for a period of 40 years, i.e. from 1971 to 2010 in nine subject areas, namely Chemical Sciences, Physical Sciences, Agricultural Sciences, Biological Sciences, Engineering & Technology, Medical & Health Sciences, Arts and Humanities, Social Sciences and Science Miscellaneous & SI to examine increase in number of publications over a period of 40 years. It is observed that the number of research articles produced by these 50 universities has increased by more than 75% in past 5 years when these



universities have access to e-resources through the Consortium in comparison to the previous block of 5 years. It is further observed that the Bradford's empirical law of concentration of journal of articles in scientific periodicals is also applicable to the research output of 50 universities covered in this study. When universities are arranged in order of decreasing productivity of articles, they may be divided into core group of most productive universities and a number of groups of increasing number of universities containing the same number of articles as the core group. Moreover, these 50 universities produced 220,472 research publications between 1971 and 2010 which is 25.05% of total research output of India and 0.47% of total research output of the world during the same period. Further, contribution of these 50 universities to the world's most productive research areas ranges from the maximum of 1.54% in chemistry, followed by 1.28% in case of physics and material sciences to minimum of 0.04% in case of cardiovascular system cardiology and haematology. It can also be observed that these 50 universities accounts for more than 50% publications to the India's total publications in environmental sciences and literature. Besides, India's contribution to the World's most productive research areas is negligible in cardiovascular system cardiology (0.65%), haematology (0.93%) and neurosciences & neurology (1.08%). A strong and positive correlation is observed amongst the most productive research areas of World, India as well as that of these 50 universities. The value Pearson's Ranks order Coefficient Correlation between World and these 50 universities is 0.89 and between India and these 50 universities is 0.98. 50 universities covered in this study collaborated with other organisations for a total number of 83,377 research papers including 30,652 international collaborative papers. Total international collaborative publications vary from the maximum of 24.85% in chemical sciences followed by 30.77% in physical sciences to the minimum of 0.32% in arts and humanities.

**Impact of research publications:** Total number of 220,472 publications produces by 50 universities received 1,647,640 citations over a period of 40 years, i.e. from 1971 to 2010. On average every articles was cited 7.47 times. These universities can be categorised into the five groups based on number of citations received by them. First two universities, namely Banaras Hindu University and University of Delhi, accounts for more than 1.5 lakh citations each followed by 12 universities accounting for more than 25 thousand citations each. It can also be observed that research publications from 14 universities account for 65.37% citations and remaining 34.63% citations were received by publications from 36 universities. The cited rate varies from the maximum of 83.16% in chemical sciences to the minimum of 15.09% in arts and humanities. The article identifies top ten universities with greater impact in terms of H Index in each of the nine subject areas mentioned above during 1971 to 2010.

**Correlation between usage of e-resources and research productivity:** Strong and positive correlation is found between number of articles downloaded from e-resources subscribed through the UGC-INFONET Digital Library Consortium by these 50 universities and number of research publications produced by them. The value of Pearson's Ranks Order Coefficient Correlation is 0.75.

This article is a by-product of a compilation entitled "Measuring research Output and its Impact Using Bibliometric Indicators: Profiles of 50 Selected Universities" brought out by the INFLIBNET Centre with an aim to sensitise academic administrators and policy makers on measuring and evaluating research performance and ranking of academic institutions. The compilation consists of profiles of 50 universities with a detailed analysis of their research output, its impact, focused areas of research and national and international collaborations. The study, initially conducted on 50 universities, will further be extended to remaining 150 member universities of the UGC-INFONET Digital Library Consortium. Moreover, further study may also consider other research productivity indicators such as Ph.D. theses produced and research grants received by member universities.

# **Measuring the effectiveness of leadership behavior styles among university library professionals: a case study of Bangladesh**

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**Abstract:** Defining the term effectiveness is a complex phenomenon. It may be defined as quality or state of being effective. It seems very evident there that unless we understand the term effective, the term effectiveness cannot be defined. Effectiveness as the quality in writing which enables an author to produce effects and results intended or expected. Therefore, effectiveness can be defined as the quality of something if it produces the results that it was intended to. On the other hand, Leadership is the most observed and least understood phenomenon. It is very difficult to define leadership and arrive at general consensus. Leadership may involve such acts as structure, the work relations, praising or criticizing group members and showing consideration for their welfare and feeling. Leadership is defined as the ability of the leader to influence and persuade his subordinates so that they willingly contribute to achieve organizational goals and objectives. For the purpose of this study, leader behaviour or style is assessing the boss or superior and following types of leadership styles are identified: Authoritarian, Bureaucratic, Task oriented, Participative, Nurturant Style. The importance of effective management for a productive library is anxious now-a-days while rising and maintaining high performance considered as an essential element for achieving organizational goals. This challenge can be properly managed by the leadership which plays a vital role in ensuring library effectiveness. The study aims to assess the library effectiveness by measuring the leadership behavior styles among the library professionals in four university libraries in Bangladesh. Specifically, explores the leadership styles of library staffs and determines how the demographic and educational information affect leadership. Seventy-eight professionals were surveyed by using a 5-point Likert scale and survey instrument developed based on expert reviews as well as a pilot study. Empirical data were analyzed to identify the factorial validity and identification of the important factors that have impact on library effectiveness whereas statistical techniques like factor analysis, correlation, ANOVA has been done through SPSS. Result shows, both public and private university libraries differ in practicing their leadership. Dhaka University and North-South University Libraries have higher authoritarian and task oriented styles and lesser participative, bureaucratic and nurturant styles in comparison to others. In addition, the study also reveals the dimensions and hindrances of developing effective leadership and librarianship. Moreover, it has policy implication for the authorities to improve effectiveness regardless the differences in study context. Being pioneered, the research put effort only to analyze leadership of library professionals and there is ample opportunity of future research for improving in-house leadership and making optimal use of staff's performance in Bangladesh and beyond.

**Keywords:** Library professionals, Leadership, Effectiveness, Behavior styles, Bangladesh

## Measuring the impact of community outreach in rural libraries

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**Abstract:** Eighty-four percent of land in the United States is rural with twenty-five percent of the total population living in rural areas. According to the US Census, baby boomers are now poised to significantly increase the population of 55-75 year olds in rural and small-town America through 2020, with major social and economic implications for their chosen destinations.

Public libraries were viewed as an indicator of what makes a particular community attractive to existing and potential residents. One way of gaining more community support is for libraries to design and implement community outreach activities that partner with outside organizations. Using survey tools build and implement community outreach plans, this paper reports how librarians and information professionals in rural Texas finding out what their constituents wanted and building community-centered outreach programs. Community-centered paradigm may gain more institutional support and increase competitiveness of rural information professionals.

## Medical librarians as developers of e-learning courses in evidence based practice

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**Abstract:**

### INTRODUCTION

Evidence based practice (EBP) plays a key role in translational medicine supporting application of biomedical research results to clinical practice. Medical librarians and information specialists occupy an irreplaceable position in the process of searching and finding best evidence.

### AIM

The goal of the paper is to demonstrate efficiency of e-learning in training medical librarians and undergraduate medical students to acquire inevitable EBP knowledge and skills.

### MATERIALS, METHODS

Two collaborative organizations in the Czech Republic, i.e. National Medical Library in Prague (NML-P) and Palacky University Medical Library in Olomouc (PUML-O) have been developing e-learning courses that are published online on the Czech medical educational portal MEFANET available at <http://www.mefanet.cz>.

### RESULTS

In 2012 NML-P developed an e-course „Library and Information Services in Healthcare“ suited for medical and health librarians. Module 4 dealing with EBP issues was

elaborated in cooperation with PUML-O. There were 32 participants that completed it including pre- and post-tests.

PUML-O adapted some of the EBP e-learning materials and integrated them into an elective undergraduate course „Evidence Based Pediatrics“ with the essential input from a clinician teacher and a biostatistician. Much attention was paid to critical appraisal of a clinical article (meta-analysis) supported by an interactive wizard and detailed e-chapter explaining statistical measures. A total of 25 undergraduate students enrolled and completed the course.

#### CONCLUSIONS

Our collaborative efforts have proven practical in developing online educational courses in EBP. In particular, we have been sharing proper teaching methods, e-learning materials and a common online publishing solution MEFANET.

## Memory institutions and copyright policies

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**Abstract:** As an essential and irreplaceable component of the cultural, educational and informational infrastructure libraries and other memory institutions take a unique place in our society. Copyright, libraries and users are subject that aimed to help the cultural institution managers in construction of policies, in accordance with the requirements of the copyright and neighbouring right law in offering services and resources. The emergence of new communication and information technologies and new media predetermines the ambition of copyright legislation worldwide to respond to these developments, to keep pace with changes and to provide the necessary legal framework. The report presents the design concept of a research project with international participation "Copyright Policies of libraries and other cultural institutions" (2012-2014), (financed by National Science Fund of the Bulgarian Ministry of Education, Youth and Science, Contract № ДФНИ-K01/0002-21.11.2012). So far in Bulgaria, Turkey and Croatia there is no study about a copyright policy in library and cultural institutions, as well as about the establishment of copyright competence of specialists. The project covers interdisciplinary problems - study of the role and tasks of the library, educational and cultural institutions to provide services in compliance with the copyright rules according to the new realities of the digital age. It is focused on issues of library and information sciences for cultural heritage and legal sciences. **The main objective** is to examine the copyright policy of the library and cultural institutions in Bulgaria, Croatia, Turkey and others, and through comparisons and analyzes to reach: new research products and educational content in academic programs and continuing education; proposals for updating the copyright legislation; preparation of practical and applied models of copyright policy for library, educational and cultural institutions responsible for the modern information environment and specific needs. **Methods:** Interdisciplinary research instrument – analysis and synthesis, bibliographic survey, questionnaire survey (traditional and web-based) in Bulgaria, Turkey and Croatia; information approach; Case Study; website and data base development; educational activities; PR strategy etc.

**Expected results:** Scientific: monograph, training tool, specialized website, database, etc.; thematic bibliographic study; Case Study in European cultural institutions and universities and collaboration with scientific work groups; questionnaire survey of copyright policy of cultural institutions in Bulgaria, Croatia and Turkey and prepared recommendations for legislative changes; tracking Bulgarian periodicals in DOAJ and

analysis of journals in all fields of knowledge; preparation of the list of open access repositories in the field of library and information sciences and cultural heritage and law sciences; translations of materials of WIPO, IFLA, eIFL network etc. Training and **Methodology:** a new curriculum in academic programs and continuing education; master class of foreign researchers, conferences and seminars. Practical and applied results: models of copyright policy for cultural and educational institutions, training seminar for practitioners.

**Keywords:** Memory institutions, Libraries, Copyright, Digitalization, Intellectual property

## **Methodological proposal for analyzing the development of information policies to promote the society of information and knowledge in Mexico**

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**Abstract:** The aim of this article is to present the methodological proposal to analyze the information policies intended to promote the society of information and knowledge in Mexico.

A comparative study with the purpose of identifying the following is proposed:

- 1) Type of policies designed in each entity and scope regarding the concepts of society of information and society of knowledge.
- 2) Factors prevailing in the development of information policies.
- 3) Type of information policies common in Mexican institutions.
- 4) Agreement with information policies proposed by the Federal Government.

The relevance of applying the qualitative comparative analysis (QCA) proposed by Charles Ragin is considered.

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## **Methodological research use documentary in the study of application of Linked Open Data in digital academic library**

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**Abstract:** From the methodological use of documentary research (ID) in the study of the application of Linked Open Data in academic digital library presents a systematic procedure of inquiry, collection, organization and interpretation of information, which has helped explain the variables in our studied.

By outlining the stages of document research, embodying the process that has allowed organizing and representing information used in the investigation. In turn, describes the planning that has guided the development of the same, and are the aspects that have been considered for the organization, analysis and interpretation of the information captured in our study.

Documentary research has enabled a thorough review on topics that relate to our subject, employing techniques of search and information retrieval in various documentary sources. Thus, it was possible to compare the results we have obtained so far with other similar studies. Thus, because of the large amount of information currently available, any researcher worth his salt should know the main documentary sources and mechanisms dominate access, search, collection and organization of documentary information.

The application of the ID has allowed the extraction of the necessary attributes that are interrelated in a comprehensive context for their respective study, where it seeks to identify study and analyze the potential offered Linked Open Data for academic digital libraries, with particular emphasis on those that may impact their services and collections. Finally, we show the methodological advances regarding the study of the application of Linked Open Data in academic digital library that can generate an innovative alternative for research support in the academic context.

## **Methology used in the strategic development plan of the National Library of Estonia**

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**Abstract:** The evaluation of service quality in 2011 gave valuable information to the National Library of Estonia (NLE) and served as solid ground to compose the library's strategic development plan for 2013-2017. The aim of the process was to modernise and bring together the service and marketing spheres, to make all the links of the chain more user-oriented and to work out the main steps for achieving the goals and measuring the results. The necessity of changes was obvious due to the latest developments in the field of ICT: the changes in users' information search behaviour; the importance of better use of the library's potential (human resources as well as physical and electronic library); the need to find more effective ways to introduce the possibilities of e-library services.

An expert taskforce was formed of library specialists with the aim to bring forward the main problems and solutions of the library's performance. The methods of the qualitative survey based on the expert group knowledge were the following: comparative analysis of the mission and vision of different national libraries; narrative inquiry (the articles for the

future were composed); mystery shopping: visits were paid to libraries, memory and other institutions with well known high quality service; a short questionnaire for the main values in the organisational culture created etc. The essential problem of the focus group survey involved and concentrated on the target audience of the library.

The main results of the experts survey were included in the strategic development plan – the library has to focus on service quality, especially on the e-library service quality. The traditional library services are going to decrease and the role of related functions is increasing. With the help of national cultural policy the access to e-documents has to become easier and the digital library services must be developed in a more targeted way. The fact is that library service has already become more personal and the standards of better qualification of librarians are of crucial importance.

**Keywords:** National library, Estonia, Quality management, Methods of qualitative research, Expert group survey, Strategic development plan

## **Metrics of value and profitability of electronic information in academic libraries: the case of the University of León**

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**Abstract:** The profitability of electronic information involves at least relationship between quantity and quality of content supply, use and cost made, as well as time saving and scientific productivity of researchers.

The paper will be based in the investment made by the Library of the University of León (Spain) in electronic resources, principally prices of subscriptions to the main Big deals (Emerald, ScienceDirect, Springer, Wiley). These data would be connected with statistics of downloads of articles of the same providers that shows the consumption of electronic journals made by the academic community of León. Also information about amount of reading time saved by readers gathered from surveys will be used. The trend of publishing of researchers through the data obtained from the Web of Science and Scopus will be also considered for evaluating the benefits of electronic publications. We will base our approach to Return-On-Investment (ROI) in downloads and investment in the subscription fee. Besides, ROI in e-content subscription will be estimated quantifying research projects, scholarships and prizes awarded. The mentioned work will permit to propose metrics for evaluating the profitability of electronic information at universities and set specifically the benefits at the University of León.

## **Metrics to evaluate strategic assets in virtual libraries**

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**Abstract:** Virtual Libraries (VLs) should ensure that their stored information is accessible by the target users. This work is focused on the analysis of information access performance metrics adopted in São Paulo Research Foundation (FAPESP)'s VL

([www.bv.fapesp.br](http://www.bv.fapesp.br)), as well as on the main implementations developed that have enhanced (or not) the success criteria evaluated by the performance metrics. FAPESP's VL is responsible for bringing to society the metadata of more than 150,000 Research Projects and Scholarships in all areas of knowledge funded by this sponsoring agency, together with the metadata of their results published in the academia. The different metrics adopted are meant to evaluate the VL's strategic assets: i) Visibility; ii) User's interest; iii) Dissemination done by third parties; iv) Internationalization. In order to meet these objectives, the metrics adopted are: i) Visits and Page views; ii) Bounce rate and Pages per visit; iii) Total of inbound links from external domains; iv) Total of countries from which the visits were originated and Representativeness of international visits. These metrics have been the guidelines for new implementations since 2009. The following examples of results achieved are categorized by metric and identifies implementations that led to a success (or not). Since 2009, the information system's developer team have been working to improve the codes of web pages to become crawler friendly. This work has resulted in a 2,000% boost in VL's visibility when the years of 2009 and 2012 are compared, a 200% referral traffic increase because of VL dissemination done by third parties and a 226% rise in the number of countries that visited the VL. In 2010, a Social Media experimentation has started in order to improve the results in metrics i) and iii). The Social Media tool adopted is Twitter and it hasn't presented a significant result yet. In 2012, the team implemented some dynamic and interactive tools, such as maps and charts, to summarize thematic information that would be hard for a user to process as a list. This implementation improved the users' interest in the VL in more than 75%. Also in 2012, since this VL has been focused on research grants and scholarships, the team has worked in automatic generated web pages that focus on specific data fields from all the grants and scholarships. The fields adopted so far are the ones about the Researchers and the Keywords. This implementation has made available more than 80,000 automatic generated web pages for each individual researcher who worked/works in a grant/scholarship and more than 20,000 web pages for each keyword submitted by the researcher in order to describe his grant/scholarship. These automatic generated web pages have boosted metrics i), ii) and iii) and are the most representative pages accessed by the users, with more than 25%. This set of metrics as a guideline to check for success in new developments for Virtual Libraries proved to be efficient in order to boost their presence in the World Wide Web.

**Keywords:** Information access, Virtual libraries, Performance metrics, Funding agency, Scientific research

## **A mixed method framework for evaluating video digital libraries**

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**Abstract:** This paper generalizes the methodology of a comprehensive interactive video retrieval study in order to propose a framework that can be applicable for evaluating users, uses, effectiveness, and efficiency of interactive digital libraries. The video digital library study from which this methodological framework was created, considered to be one of the more detailed set of findings presently disseminated [1,2,3,4], asked users from a defined experimental and thus collection domain (i.e. science education) to attempt a series of video search topics using a prototype digital library. User selection is addressed, which, in the guiding user study, comprised a total of twenty-eight users from



the field of science education, including 23 full-time practicing teachers and 5 education majors (college seniors). Other experimental design aspects include experiment durations and the number of video search topics (per user) needed to both ensure adequate exposure to the system and avoid user fatigue. The experimental video digital library offered a comprehensive set of user interface features, spanning textual and visual searches and various video-browse capabilities, for retrieving clips from a collection of science educational videos. The framework proposed here depicts a thorough set of different evaluations that are significant to digital library studies, specifically, such as quantitative measures deriving from server logs, in order to analyze user actions and topic durations, and pre-, post-, and post-search questions, which measure outcomes related to user perceptions and experience. Factors for which to compare and contrast these measures against are also outlined in the framework, including defined search topic categories, based on number of steps and type of information (e.g. visual vs. textual vs. both), level of topic difficulty, and different user groups with varying knowledge of the experimental domain and video collection. Qualitative measures, which are not all that common to larger interactive information retrieval studies, are also proposed including closing interviews and the themes relevant to a digital library evaluation, and observational analyses aimed at obtaining deeper understanding of users' behaviors and justifications thereof.

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## **Mobility and employability of Information System Management graduates**

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**Abstract:** Tracer study on graduates is an important tool for a university to get feedback from its former students. Although the study may have been done by the university on the whole but similar initiatives taken by any particular faculty will provide more input to specifically cater the need of the faculty for improvement, adjustment and realignment. With the rapid changes in the employment market due to the technology advancement and the rise for the need of the graduates to be a life-long learner, this tracer study on Information Systems Management (ISM) graduates can be seen as an important tool for an institutional development and a continuous evaluation on the performance of the programme can be performed. The detailed explanation and views regarding the

graduates' employability, mobility and their retrospective assessment of the courses they have taken will benefit the institution in a way that the findings can be recorded and deliberated for future curriculum reviews. Furthermore, the feedback is also necessary to meet the requirement of Malaysian Qualification Accreditation's (MQA) that states the programme/curriculum committee should obtain feedback about graduates from employers and should use the information for curriculum improvement. The tracer study would also help to clearly identify and evaluate the value of the product of the ISM as information workers. The objectives of the study are (1) to investigate the employability of the Information System Management graduates, (2) to examine the job and occupational mobility of the Information System Management graduates, and lastly (3) to evaluate views and feedback from the graduates on the faculty's resources and the Information System Management courses. For this research, a combination of qualitative and quantitative methods was applied. The qualitative portion was done to identify the agreed opinion across the selected ISM graduates regarding their stand on employability and mobility. The quantitative part is to crosscheck whether the opinions of selected graduates can be agreed upon by the rest of the graduates from the ISM degree programme. Overall, the graduates of ISM are able to penetrate the job market because of the combination of courses offered in the programme. The study has shown that many of the graduates have the ability to acquire job as IT professionals as well as non-IT positions and even though most ISM graduates have professional certificates in the IT field, it does not guarantee that they will enrol in IT professional positions. Male graduates are more mobile as majority of them has worked in two or more places in their career while majority of female graduates remain at the job where they were first hired. Meanwhile, male graduates have deep interest in IT where many of them continue to work in the IT profession even though they have moved to different organisations.

**Keywords:** Tracer study, Information system management, Employability, Mobility

## **Modern stereotypes about libraries and librarians in Romania**

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**Abstract:** Stereotypes related to traditional libraries and librarians in Romania are in general, well known and widely circulated all over the world; they are relatively resistant to changes despite the fact that the type of interaction librarian – public and the type of mediation of the information in documentary services have diversified due to the newly developed information and communication technologies: online reference services, e-mail, and web pages information, which resulted in the re-invention of a library's identity (reconsideration of its mission from the perspective of the information culture, of managerial policies, of spaces, of access to the collections, and of services. This study aims at showing if the mentality of the Romanian public concerning libraries has also started changing. The ways chosen by librarians from different countries to amend, in the public's conscience, the image of the traditional library are fascinating and imaginative.

In Romania, the stereotypes circulated and popularised about the trade of librarian would be: female, wearing glasses, suspicious, difficult to most often irritable, etc. These labels are still strong because many libraries, particularly school ones, have not been informatised and do not provide direct access to the bookshelves. Then, there is also a reservation about the library area, seen by many potential users as a relic of Communism:

an inconspicuous, cold, dusty area hosting old books. Some of the stereotypes were collected from blogs, jokes, and books.

Though it is extremely difficult to eliminate stereotypes, this is possible through intercultural education and good marketing. Of great help for public libraries in this respect was the Project “Biblionet” carried out these four years, a project based on extremely experienced media campaigns and the support of media personalities. Libraries of all types attempt to diversify their services, to update them depending on the requirements of the public, and also to modernise their areas. They have built these twenty years numerous libraries – both public and academic: the most recent one is the establishment of the Romanian National Library inaugurated in 2012.

Prejudiced ideas about the trade of librarian are harmful to trade; in most cases, they keep the public away from the library as a source of information and documentation and even in the choice of a library as a major option for education and future career. To investigate the way in which established stereotypes about libraries still apply or if they have altered in the mind of the Romanian public and of the librarians themselves, we have used both quantitative and qualitative methods (focus-group and questionnaire).

**Keywords:** Information Literacy, Stereotypes about (Romanian) libraries and librarians, Communication in libraries, Quantitative and qualitative methods in library management

## **Modernization of Library and Information Science Education through the enhancement of intercultural communication**

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**Abstract:** Intercultural communication is becoming increasingly important in education but also in our society in general due to the rise of globalisation and increasingly multicultural study and work environments. This paper discusses the methodology used and research results of the project that explored intercultural communication in library and information science (LIS) education, more specifically in online learning environment. This research focused on answering the following central question: What is the nature of successful intercultural communication and what are the factors and conditions which influence this? A qualitative approach was used in this study; semi-structured interviews were conducted with two groups of students – students from the International Master in Digital Library Learning (DILL) which is a two-year collaborative master program between Oslo and Akershus University College of Applied Sciences in Norway, Tallinn University in Estonia and Parma University in Italy, and students from the Parma-Northumbria Joint Course, the International Master in Information Studies. Thirty six in-depth interviews were conducted with students from eighteen countries; from Australia, Canada, Colombia, Ethiopia, Ghana, India, Indonesia, Italy, Kenya, Kosovo, Kyrgyzstan, Laos, Maldives, Malta, Romania, South Africa, Tanzania, and Thailand. The data was analyzed using a constant comparative method of data analysis to provide a holistic picture of the contextual factors influencing the intercultural communication in the online learning of library and information science education.

The results of the study will contribute to the enhancement of the ways in which students could be supported within international online programmes. Findings can be used to

develop a framework which identifies a series of factors and conditions that needs to be considered in the process of facilitating intercultural communication in LIS curricula and can help guide academics in library and information science education.

**Keywords:** Library and Information Science education, Online education, E-learning, Intercultural communication, Qualitative study

## **Monitoring and evaluation of electronic health information resources usage in universities in Uganda**

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**Abstract:** This article reports on a study carried out on electronic health information resources usage in three universities in Uganda. One of the objectives of the study was to examine the mechanisms used in monitoring and evaluation (M&E) of e-resources usage in universities offering medical education. The study was carried out to assess the impact of M&E on the performance of the libraries as they support learning, teaching and research. We used data gathered through interviews. Heads of departments and librarians participated in the qualitative study. The findings of the study indicated that libraries lacked home grown M&E tools, and there was a tendency to rely on publisher-generated usage data, which may explain why M&E of usage was not well carried out. All Heads of departments (100%) indicated that M&E of usage was not done at departmental level. 83% of the librarians indicated that M&E of usage was done at library level, although different mechanisms were used to gather data, which made it difficult to analyse. No policy had so far been formulated to ensure that universities measured usage of the costly resources. M&E had an important role to play in assessing electronic health resources usage and as a performance measure for libraries to improve library services. The study contributes to the body of knowledge in Library and Information Science. It can guide curriculum development / revision to include metrics of e-resources usage to ensure that universities have value for the money spent on e-resources acquisition, access and use. Furthermore, the proposed standardised, locally-tailored M&E toolkit can support comprehensive measurement of usage of e-resources. The study can also be used by universities to inform policy formulation regarding access to and use of e-resources.

**Keywords:** Monitoring and evaluation, Electronic health information, Academic libraries, Universities, Uganda

## **Multicultural children's books at the French Canadian public library: where can I find them?**

*Anne-Marie Dionne*

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**Abstract:** During the last thirty years, the demographics of the French Canadian population have been through tremendous changes due in great part to immigration from African and Asian countries. But despite this increasing diversity that came to enrich the cultural mosaic of Canada, little is known about the availability of French Canadian picture books that feature people from diverse racial or ethnic backgrounds. Exposure to multicultural children's literature has been shown to be important to bolster the self-esteem and cultural identity of children from diverse cultural backgrounds (Louie, 2006). As for the native children, cultural images that are embedded in stories and illustrations of multicultural books can contribute to define their beliefs and attitudes regarding people of diverse backgrounds (Yenika-Agbaw, 2008). Therefore, it is important for all children to have access to multicultural picture books, not only at home or at school, but also at their local library.

#### **Research Question**

The present study aims to analyse picture books published by French Canadian editors between 2003 and 2012 in order to quantitatively evaluate the importance of the representations of people from diverse racial or ethnic backgrounds. More specifically, it aims to answer the following questions: What percentage of picture books published by French Canadian editors from 2003 to 2012 feature people from diverse racial or ethnic backgrounds? What individual groups are represented and to what extent?

#### **Research methodology**

From a quarterly journal dedicated to reviewing all the French children's books published in Canada, we were able to make a list of most of the picture books published by French Canadian editors between 2003 and 2012. In each journal, a special section is dedicated to the review of picture books. As much as 1 132 entries were found. In our sample, only the 794 picture books that contained human beings were included. After obtaining each of those picture books from a local public library, they were examined by two assistants and the researcher in order to record the following information: race or ethnicity of the characters, race or ethnicity of authors and illustrators (mostly obtained by online research) as well as bibliographic information. Following a classification developed by Hughes-Hassell and Cox's (2010), picture books were then classified into categories in order to get some quantitative data regarding the representations of different races and ethnicities.

#### **Summary of research findings**

Results indicate that of the 794 picture books that were analysed, only a small percentage contained people from diverse racial or ethnic backgrounds. Among those people, just a few groups could be identified. Details of our results will be revealed in our presentation. We will also underline the consequences that such a scarcity of multicultural picture books could have on children, as well as what public libraries could do to alleviate the situation.

## **Museum of Contemporary Art in Belgrade**

*Olivera Nastic*

Serbia

**Abstract:** The Museum of Contemporary Art in Belgrade (MoCAB) was opened on October 20th 1965. However, Museum activities began as early as 1958, when the institution of a Modern Gallery was formed with the purpose to oversee the development of contemporary art in Yugoslavia. After the construction of the new building was

completed, the Council of the Modern Gallery gave a new name to the institution the Museum of Contemporary Art.

The reasons for the foundation of the Museum were, in nutshell, these: to collect, research and display most valuable and distinctive works of Yugoslav art in the 20th century; to organize exhibitions of local and international contemporary art and to publish publications which would enable further examination and popularization of contemporary art; to systematically collect and classify documentation about modern and contemporary art; to explore new educational methods in the fields of visual culture, and theory and history of art.

The founder and the first director of MoCAB Miodrag B. Protideveloped the conception of the Museum based on analysis of the model of the Museum of Modern Art in New York. One of the important departments of the Museum in that respect was the Art Documentation Department. It consists of the library, hemerotheque, and photo documentation. Art documentation department gathers, prepares, categorizes and stores professional literature (book, catalogues, periodicals, and electronic editions), daily press, archive material and photo documentation from the field of visual arts, especially modern and contemporary international, Yugoslav and Serbian art. Thanks to the systematic gathering of material which followed the forming of various collections and the MoCAB exhibition activity, the department is now in possession of the finest and most complete documentation, including all the material about the artistic tendencies and the artists from the territory of ex-Yugoslavia. Another assignment of the department is the preparation of all the necessary materials for exhibitions, catalogues and programs of MoCAB.

**Keywords:** Museum of Contemporary Art, Art Documentation Department, Library

## **Museums and patrimonies between subjects and objects of the globalization: theories, productions and appropriations**

*Giulia Crippa*

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**Abstract:** The idea of museum - as a place deputy to the task to offer arts, crafts and wonders to the publics, transforming them in memories, material testimonies able to support the cultural proposal that one society, or parts of it, consider representative and *worthy of exposure* to its own eyes and the others, - has been transformed in a field of controversies that involves not only the members of those institutions officially involved with the management of the patrimony, neither only the world of the scholars and experts, but also consistent parts of the so called “Civil Society”. The idea is that the citizens play a more direct role in public decisions, in this study in cultural policy, through their involvement on the issues tied to the idea of patrimony and, above all, its conservation. Without “feeling part” of a memory, without participation to the “proposed sharing” that constitutes a patrimony, the action of conservation loses its “naturalness”, becomes difficult to realize. If it is not part of the speech that the patrimony put on scene in museums and the cities, it will not find reasons for its existence nor economies for its conservation.

We can, therefore, verify some museum experiences and their communication, for they can help in a renewed discussion on memory, its sharing and its conservation.

The paper, with this premises, is oriented toward the study of cultural practices and

memorial interpretations, inside and outside institutions. We analyze literature on the issue and we offer some example bound to these practices, in geographically distant places, with different cultural traditions but, at the same time, inserted in the so called cultural globalization reality. We propose alternative patterns of cultural mediation, intertwined to Cultural Studies perspectives, mainly Latin Americans, in the perspective of globalization.

**Keywords:** Museum, Patrimony, Mediation, Appropriation

## **Museum collections in a library: valorisation and case study: Batthyaneum branch of National Library of Romania**

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**Abstract:** The Batthyaneum branch from Alba Iulia of National Library of Romania is placed among the most prestigious cultural institutions in Romania with a bicentennial tradition. The cultural thesaurus preserved here consists in manuscripts and rare books: more than 1200 manuscripts starting from the 9th century, among which the famous Codex Aureus or Das Lorscher Evangeliar and the biggest collection of incunabula from Romania (570 pieces). Aside these the library holds and important archival fonds and museum collections.

The Batthyaneum library was established in 31 of July 1789 from the initiative and expense of the Roman Catholic bishop of Transylvania Batthyány Ignác (1741-1798), within the frames of the cultural foundation initially named *Institutum Batthyani Albae Carolinae*/Batthyány Institute from Alba Iulia. The Bishop Batthyány Ignác is part of gallery of the great founders of cultural establishments in Transylvania at the turn of the eighteenth century and nineteenth century, along with Samuel Baron von Brukenthal and Count Teleki. As a part of his cultural and scientific researches Bishop Batthyány Ignác collected medieval documents, manuscripts, old and rare books, coins from archeological findings, shells and minerals. The personal collection of the Bishop Batthyány Ignác was the core of the library of Batthyány Institute and today represents the most precious part of the library.

Today the museal collection of Batthyány library holds collections of coins, seals, medals, decorations, bills, minerals, shells, astronomical instruments, religious art pieces, old pieces of fabric, paintings and archeological pieces. The first exhibition of the museum collections took place in 1912 and after 100 years, in 2012, a new exhibition was organized with the intention to be transformed in a permanent exhibition.

The paper aims to present the challenges raised by this reopening of the museum collections of the The Batthyaneum branch from Alba Iulia of National Library of Romania: from the rediscovery of some of the pieces, restoration issues to designing a brand new museum exhibition place in to a library.

## **National Library & Archives of Iran is ready for identification the right KPIs**

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**Abstract:** Quantitative measures of performance are an essential management tool in any organization. Key performance indicators (KPIs) help them meet key strategic objectives, drive and deliver change, and assess the impact and effectiveness of services. Measures, standard, and KPIs are essential for the enhancement and library transformation towards excellence.

In 2013 National Library & Archives of Iran decided to identify and describe KPIs. Past researches had showed that the one of weakness points of NLAI was lack of KPIs. This paper describes how NLAI has determined and developed the right KPIs. For this object, researchers used Iso 11620, Iso 28118, Iso 2789; KPIs related to 10 of most famous national Libraries on the world (The KPIs were received via email) and also comments of experts in this field.

The measures or indicators must be accepted, understood, and owned across the organization in order to ensure that the performance measurement becomes effective.

**Keywords:** Key performance indicators, National Library & Archives of Iran, ISO 11620, ISO 28118, ISO 2789

## **National Library of Romania – a new headquarter – new challenges and perspectives**

***Elena Tarziman***

National Library of Romania, Romania

**Abstract:** Romania has a relatively young National Library, comparing with other European national libraries and its collections reflect, by its troubled existence, development and structure the historical pathway of Romanian people.

Established in 1864, The Central Estate Library was closed in 1901 and reopened in 1956 with a total fond of 41.959 bibliographic units. Today the library holds more than 12.000.000 bibliographic units.

The specific national functions of the National Library, organizing Legal Deposit, National Bibliographic Agency and National Office for International Exchange of Publications, National Centre for ISBN-ISSN-CIP or coordinator of the National Digital Library and the administration of its constant growing collections were difficult to carry on for more than six decades in absence of an adequate headquarter. The communist period left a strong mark in the development on the National Library: the reopening and the collection development policy, taking over of some personal and institutional funds, current acquisition, donations, transfer and international exchange. The activity and the services of The Library developed in several buildings and stacks in various places in Bucharest and the country.

The first plans and discussions about a headquarter to contain all collections and activities of the National Library started at the end of the sixth decade of the XXth century. Only in 2011 the construction of this building was finished after the Government assumed as a project of national priority and with funding from The World Bank.



The moving in this new building was the most important chapter in the history of the National Library of Romania. For this project was elaborated a strategy to ensure a safe relocation of collections in the new place and for the future development of the workflow. Also it has been developed a policy for the publications from the remote stacks inaccessible for the public for decades and their integration in the new established stacks. The new building offered the opportunity to rethink the entire organization: to redesign the workflows, to add services addressed to new categories of users (children, youth, persons with disabilities, on line users), to organize new types of events thanks to new specific spaces (exhibitions, concerts) and open spaces within the building and outside the building.

The paper aims to point out the main challenges raised by the moving in this new building and how it will help to redefine the institutional identity on National Library of Romania.

## **Need of Institutional Repositories in archiving indigenous scholarly literature: a developing country perspective**

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**Abstract:** Institutional Repositories (IRs) are digital archives of intellectual output of academic and research institutes and provide free access to it. This study aims to explore the practices of IRs in developed worlds and its need in the local context. This study has the following objectives:

- To collect the data about the journals published by PU and its availability
- To explore the perception of researchers about an institutional repository in PU
- To assess the impact of IR on research output and its visibility
- Identify gaps in present knowledge recording system and suggest ways to opt best practices in this regard

It is a qualitative study based on literature review, web content analysis, and focus group with LIS researchers and semi-structured interviews with LIS professionals and faculty members.

It is found that IR is the need of hour specially an institution that published 32 research journals annually, more than 350 research articles in international journals, Produced 250 PhD theses annually, and 237 research projects. Finding shows that LIS researchers/practitioners and university teachers are in strongly agree with the existence of IR. They also have some concerns about its sustainability and up dateless. It is not a simple task to develop an IR, there is copyright, technological, and financial and trained human resource issues. It is also a long term plan that needs to be done as a project not a routine task. There is need to plan it systematically and extensively because now IRs are more an issue of policy decision rather than only a technological issue. It is also suggested that all researchers and teachers are bond to submit their intellectual output (national and international articles, theses, conference papers, books/ book chapters, research projects, presentation and grey literature) to the university in digital format along with print form to develop a digital collection of the university.

## **Needs and practices in the use of electronic journals: the case of teachers/researchers of an Engineering college**

*Diana Machado and Fernanda Martins*

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**Abstract:** In this information era, where the field of information technology and communication prevail, scientific journals in electronic format are an information channel increasingly used by researchers, since they allow the comparison of results at an international level which makes possible to best develop Science. This research was mainly focused on the study of the use of electronic journals by teachers/researchers from Chemical and Informatics Departments of the Faculty of Engineering of Porto, Portugal. In this study a survey was used in order to characterize the levels of access of electronic journals by this community. Results show that there are different ways of seeking and using scientific information namely in terms frequency of access, number of articles consulted, use of databases and preference of publishing mode.

**Keywords:** Information behaviour, Scientific Communication, Scientific journals in electronic format, Models of informational behaviour

## **New possibilities for e-learning master programs in LIS and cultural heritage sciences education in Bulgaria**

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**Abstract:** State University of Library Studies and Information Technologies (SULSIT) is the important centre in Bulgaria for realization of contemporary research, applied and educational projects, connected to the use of information and communication technologies in LIS education and Lifelong Learning programs. The scientific report examines the new opportunities for the Faculty of Library Studies and Cultural Heritage at SULSIT (FLSCH in SULSIT) via the project "Distance Education in Library and Information Science, Print Communications and Cultural Heritage Sciences" (Contract № BG051PO0001-4.3.04-0039). The project is accomplished with the financial support of OP "Human Resources Development", Scheme grants BG051PO0001-4.3.04

“Development of electronic forms of distance learning in higher education”, co-financed by the European Social Fund of the European Union, and headed by Prof. DSc Ivanka Yankova – Dean of the FLSCH in SULSIT. The goals and objectives set by the project team provide an opportunity to develop distance education training programs for Master level students in the system of higher education in Bulgaria as answer to the actual needs of professionals for library information, book publishing and cultural spheres. **Specific objectives to be achieved:** implementation of the strategy for use of *e*-forms for distance learning in the departments of the Faculty and professional development of faculty staff, development and implementation of learning process in four new curriculums with generation of educational content and creation of electronic and multimedia materials to support the learning process, and set up an *e*-library with full-text resources, methodologies and tools, and *e*-thesis repository and master thesis.

**Expected results:** establishment of management structures and mechanisms for distance learning in the Faculty – Functional bureau for distance education at the Faculty with own infrastructure and technological potential, and increase the capacity of the Centre for Distance Learning (CDL) and the Centre for Continuing Education (CCE) in SULSIT; maintain of own website; implementation of version 2012 of the *e*-platform ILIAS; training of trainers; creation of tailored training materials; *e*-Portfolio for informal-education of faculty members; training of 30 lecturers, administrators and technical staff of the Faculty on the use of DL *e*-forms lead by the “trainers”; generating new curriculum and created 14 new electronic and multimedia resources will be created; a virtual library “E-library in Library and Information Science, Communications and Cultural Heritage”; establishing and maintaining *e*-repository for course projects and master thesis – as a result of distance learning in FLSCH and database as a future depositary of SULSIT; PR-campaign for promotion the programs of the DL in Faculty and for attracting students; conducting of teaching in one disciplinary/module of a total 80 students; updating internal academic systems for assurance and quality control, and Recommendations for optimization the management of distance learning; conducting conference for presenting the project results. **Acknowledgments.** This research gives possibilities of collaboration with young scientists and they contribute in this paper via financial support of the Project “Creating an information environment to motivate and encourage young researchers in SULSIT”, Contract BG051PO001-3.3.06-0055, OP “Human Resources Development”, co-financed by the European Social Fund of the European Union”.

**Keywords:** Distance education in LIS, Print Communications and Cultural Heritage Sciences, E-learning content, Methodology of distance learning

## **New questions arise: are bibliometric indicators adequate for evaluating the scientific production of the Social Sciences and Humanities?**

*Maria João Pinto and Sofia Fernandes*

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**Abstract:** This study aims to examine the criteria and bibliometric indicators in the evaluation of scientific production and determine the appropriateness of these within the Social Sciences and Humanities.

In an international context, higher education institutions, research centers and groups and funding agencies plan to evaluate qualitatively and quantitatively the scientific production from all areas based on the same indicators.

In fact, scientific areas differ from their nature, publication types to the geographical area in publishing, among other factors. Furthermore, standardization of criteria and indicators for general unique and all scientific truth may not reflect the results of research and publication of each area.

This article collects and analyzes the criteria and indicators for evaluating qualitative and quantitative effects. On the other hand, it makes a collection of information published on the application of this model to evaluate the areas of Social Sciences and Humanities.

We sought to information published by information professionals dedicated to the evaluation of scientific literature and also reports and pronouncements of research centers and higher education institutions. Based on a survey of published information in this area, we tried to identify possible shortcomings of this evaluation model, these areas specifically.

Only with an understanding of research and publication in its field, it may be possible to refute the assessment model in place and also consider the possibility and feasibility of presenting a proper assessment model.

This is a necessity in the Humanities and Social Sciences that is demonstrated in the literature.

**Keywords:** Bibliometric indicators, Scientific evaluation, Social sciences, Humanities, Quality, Productivity, Impact

## **A new revolution in Indian library automation: a case study of Koha open source software implementation**

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**Abstract:** Koha Library Automation Software has revolutionized the Indian Libraries with its most advanced and cost effective open source solution. Koha is a fourth generation Library Management Software with features like Web-centric architecture, global standards including MARC 21; Z 39.50 information retrieval protocol, UNICODE compliant, MySQL as backend RDBMS and Apache Web Server and provides tremendous freedom for customization. All this has attracted the implementation of Koha in India Libraries widely. So, the purpose of this paper is to make a strong case for the adoption of open source software in various libraries and information centres in India.

Organisations and various institutions in India like Developing Library Network (DELNET), University of Madras, Mizoram University, Bose Institute, Kolkata and many more are promoting the use of Koha, the open-source integrated library system. They are helping libraries to march ahead in the Internet era and serve their users with global resources for study, reference and research and try to be at par with the best libraries in the World. DELNET is conducting regional workshops all over in India to familiarise the participants with the Koha software.

Another example is of Nucsoft OSS Labs who are providing support to Indian Libraries with the mission of providing world class training and IT support solutions for Open Source Software (OSS). Presently they have over 50 Koha implementations and are known to be the most experienced Indian Koha vendor. Some of Koha implementations done by OSS are British Council Libraries, in India; University of Mysore; University of Agricultural Sciences, Bangalore; North East Hill University, Shillong; Independent Library Consortium, Bangalore; Azim Premji University, Bangalore; Public Archives,

India and many more. The paper will analyze the different installations of Koha in Indian Libraries. It will also discuss rapid spread of Koha amongst Indian libraries and how it is emphasizing its viability and growing competitiveness in the library management system market.

The proposal will study some of the major success implementations in India like Delhi Public Library System which has a collection of 15 lacs books, British Council Libraries, Indira Gandhi National Open University etc. In Maharashtra, India a project known as Granthalaya has started to envision for Union Catalogue of Public Libraries in Konkan region. Similarly Kerala State Government has declared Koha as its official software for computerization of Government administered Libraries.

The proposal will also discuss and elaborate about one of the major initiatives taken by Indian Government under National Mission on Education through ICT (NMEICT) by Ministry of Human Resource Development (MHRD), Government of India to start Library Automation & Resource Sharing Network Project. The project aims to provide training of librarians in library automation, especially in open source library automation package KOHA. It will set up a central database with KOHA installation on Sakshat server (an Indian Government Educational Portal). It will discuss how the project will support libraries in library automation and feeding bibliographic data in central KOHA database. The project will also integrate with existing database of INFLIBNET, DELNET to constitute a union resource base and develop Indic script based interfaces and process retrieval interfaces.

## **Nigerian public library services: creative and innovative services in a knowledge economy**

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**Abstract:** Using the social capital theory as a conceptual framework this paper looks at the Nigerian public libraries to highlight their creative and innovative services. The paper is based on exploratory, metadata research and covers literature from public libraries in Nigeria with qualitative research on EdoState and DeltaState. The research result showed a low level of awareness and impact of knowledge management especially knowledge economy on public libraries. Innovative services and practiced includes: electronic-library centre services, children's library services, mobile phone services, indigenous knowledge services, cultural services, information/knowledge services to physically challenged, illiterate user services/talking books, visual posters drama, and study centre services for distance education. Areas such as user or customer knowledge exploitation, visual tourism, open innovation are yet to be exploited. The education of public librarians in knowledge and innovation management is highly recommended as well as customer/user knowledge assets, TQM and life- long education.

**Keywords:** Public library, Social capital, Innovative and creative library services, Knowledge management, Nigeria

## **NKCatalog On-Line and Manuscriptorium Digital Library: comparison of historical full texts**

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**Abstract:** Creation of digital libraries of elder written and documentary heritage is an important task of historical librarianship now. For the end user comfort there is the requirement of providing not only digital images of the original historical documents but also their full texts in electronic form. Moreover end users want to identify inter-textual relations, but it is difficult because of their huge amount. There is a tool for automatic full text comparison that enables both evaluation of their similarity on numerical scale and juxtaposition of identical passages. NKCatalog is such a tool that was implemented as a prototype service in Manuscriptorium digital library.

**Keywords:** NKCatalog, Manuscriptorium, Digital libraries, Digital humanities, Full text comparison, Automatic tools

## **No geography department? No problem: the map collection at Cornell University Library and the humanities**

*Boris Michev*

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**Abstract:** The paper “No Geography Department? No Problem: The Map Collection at Cornell University Library and the Humanities” describes the efforts of the Library and the Maps Unit in particular to reach out to audiences that usually are not identified as our “primary audience.”

For decades there have been no geography departments in most of the top private universities in the United States, including Cornell. Thus, the University Library’s Map Collection is in the unique and somewhat awkward position of not having a “primary audience.” In the absence of a “usual” primary audience we try to provide support to a broader audience primarily in the humanities.

Humanists are quite familiar with space as a concept or metaphor, but only lately have they developed an interest in the influence of physical, geographic space on human behavior and cultural development. GIS lies at the heart of this so-called spatial turn. With it users can detect visual patterns that remain hidden in texts and tables. The ability of GIS to integrate data from different formats by virtue of their shared geography has attracted the interest of historians, archaeologists, linguists and many other humanitarians. GIS can be applied in answering a variety of historical and cultural questions. The power of GIS for the humanities lies in its ability to integrate information from a common location, regardless of format, and to visualize the results in combinations of transparent layers on a map of the geography shared by the data. In this context, the new exhibits we mount every six months in the lobby in front of the Maps Room serve two purposes: one, increasing the visibility of the Map collection, including advertising the opportunities that maps and mapping software present and two, engaging in the cultural discourse at the University, local, national, or even world level. Thanks to

this, our collaboration with various departments at CornellUniversity sharply increased the past several years. For instance, we create original maps for books by Cornell faculty; as well as maps illustrating dissertations, theses, etc. Finally, we employ instruction and outreach methods to achieve our goal to even wider audiences, for instance a six-session workshop for local school kids, introducing them to GIS and their various applications. The latter is part of a partnership between the Cornell University Library and the 4-H Career Exploration Program, which strives to provide middle- and high school children with exposure to academic fields, to develop leadership skills, to provide hands-on experience in a college setting, and to introduce them to CornellUniversity. The paper brings together the various outreach and teaching initiatives of the Map Collection and argues that the absence of a “home” department is not an impediment to the research and learning potential of maps special collections and GIS technologies.

## **Non-verbal cues as indicator of information access challenges**

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**Abstract:** This paper considers examination and interpretation of non-verbal cues, particularly facial expression, as a method for identifying and ameliorating information access needs. Ekman’s Facial Action Coding System allows for identification of affective display to correlate motives, attitudes, moods and emotions of users with physical ability challenges in their use of information and communication technologies to access information.

**Keywords:** Non-verbal cues, Technological change, Technology adaptation, Physical disabilities, Facial expression

## **Novel approach to evaluating classification schema and classification decisions leveraging traditional principles and measures**

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**Abstract:** Classification schemes, otherwise known as hierarchical taxonomies, are in widespread use in all aspects of our information environment. The literature on

classification scheme design, implementation and application is extensive. The literature on evaluation of classification schema and classification decisions is sparse. The research on classification evaluation tends to focus on five broad areas, including: (1) comparison of human and machine classification practices [1, 2, 3, 4, 5, 6]; (2) assessment of the variability of classification decisions among human and machine classifiers [7, 8, 9]; (3) comparison of machine generated classification structures and well-established classification schemes and thesauri [10, 11, 12, 13, 14]; (4) the goodness of classification in the context of information retrieval [15, 16, 17]; and (5) evaluations of the goodness of statistically generated classes [18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32]. One fundamental perspective appears to receive less treatment – the simple question of how good a fit is the object being classified to a class in a classification scheme. We suggest there are two simple reasons why this perspective has not received more attention. First, to date most classification is done by people, and we have always assumed that humans make optimal decisions. Second, until recently we have not had the capacity to evaluate those decisions in a direct, controlled and comparative way. Rather, we have had to evaluate them indirectly, from an information retrieval and end user perspective. In an expanding universe of information, classification decisions will be made by people who have neither professional information science training nor subject expertise. Classification decisions may also be made by machine classifiers. Regardless of who makes decisions, the goal is to ensure that those decisions are optimal. An optimal classification decision reflects the best choice that can be made given the information available at the time. An optimal choice may be defined as a good fit between the object and possible classes. An optimal choice presumes both a well structured classification scheme, and a classification scheme that is a good representation of the knowledge domain.

This paper reports on the results of a three-phased research project. Phase 1 focuses on the development of an evaluation framework for classification schemas. An assumption underlying this research is that classification schemas have both structural and representational qualities. To evaluate structural properties, the framework draws from and interprets Ranganathan's [4] timeless principles. For representational qualities, we consider how well a classification scheme represents the knowledge domain it supports. Representational qualities are important because they provide the knowledge base against which a classification decision is made, and ultimately support objective and quantifiable evaluations of classification decisions. Phase 1 also includes the development of a Goodness of Fit measure to support objective and quantifiable evaluation of classification decisions. Phase 2 involves the application of the framework to a sample of classification schemes in three fields: (1) education; (2) transportation; and (3) environmental sciences. The outcome of Phase 2 is a comparative evaluation of the classification schema against the framework. The criteria are applied manually to the classification schema. Evaluations are conducted manually, first within knowledge domains, and second across domains. Finally, Phase 3 involves an evaluation of the schema from a classification decision perspective. Each classification scheme is converted to a semantic profile and applied to a set of test documents using automated classification technologies. The automated classification results are comparatively evaluated using the Goodness of Fit measure. Preliminary research results suggest that there are quantitatively observable differences in machine-based classification decisions produced from classification schemas with sparse representations of knowledge domains. Preliminary research results further suggest that classification schemas exhibiting lower quality structural characteristics indirectly contribute to the lower quality classification decisions, e.g. lower Goodness of Fit measures.

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## **One website to rule them all: meeting the needs of students, faculty, and librarians**

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**Abstract:** Most academic library websites have three main audiences: students, faculty, and librarians. While there are additional audiences (including non-users, community members, staff, and parents), these three groups spend the most amount of time on our sites. Libraries risk losing credibility and customers if these three main audiences do not have a good experience on the site.

While each of these groups has a different set of needs and expectations, many academic libraries do not have the freedom, time, or skill set to develop a distinctive website for each user group. Our challenge, therefore, is to create a single website that meets the needs of each of our individual user groups without sacrificing continuity of design, quality of information, or consistency of navigation for one group over another.

- Students use the library website to locate information for assignments, leading them to experience research first-hand and continue along the spectrum of learning in higher education. Out of the three primary audiences discussed, students have the highest expectations for a website's aesthetic design, loading time, and customization. To meet the needs of this audience, the website needs to be modern, efficient, and operational 24-7.

- Faculty are one of the main sources of trickle-down information to students, as they have consistent contact with the student body. They need to have positive experiences with the library website in order to encourage their students to use it, and they need to know the capabilities and limitations of the site in order to craft successful and engaging research assignments. However, faculty members also use the library website to conduct their own research, which requires the website to offer comprehensive access to resources and very fine level searching. To meet the needs of this audience, the website needs to be transparent and comprehensive.

- Although often overlooked, librarians are also one of the primary audiences for an academic library website. Librarians use the website to locate information for themselves as well as users. We also use the website to locate information about organizational policies and procedures, information that may or may not be useful to other website visitors. However, what separates a librarian from a general faculty member is that librarians also use the library website as an instructional tool. To effectively teach students to locate, evaluate, and utilize information resources, the website must be organized, flexible, and easy to navigate.

This presentation will highlight the opportunities and challenges of building an academic library website for students, faculty, and librarians. Each speaker will address one audience and will highlight various qualitative measurements which attendees can recreate at their home institutions in order to assess the effectiveness and efficiency of their websites to make targeted improvements.

**Keywords:** Academic libraries, Web design, Communication, Usability, User needs

## **Online access in archives: a challenge for archives, archivists or archival material?**

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**Abstract:** Today, online access has become an essential requirement, especially for new-generation users who follow and take advantage of technological innovations. Online access also provides a number of advantages both for archives and users; not only does it save time, but it also offers more materials to more users and eases the archivist's workload. For this reason, this current issue is an important process for the archives. Today in most archives, the digitisation of archival material is being carried out in addition to many other techniques; in addition, programmes are being implemented to provide online access for archival material. However, alongside all the advantages that online access offers, does online access present a challenge for archives, archivists or archival material? At this point, the first challenges that come to mind are the security of the archival material, the future of reference archivists and archives as institutions, and archival awareness being erased from the public memory. The potential challenges of online access should be analysed in detail so archives will be affected to the minimum. In this context, this study determines the potential challenges of the online access process. At this point in the study, a survey-study with 53 archivists was carried out, investigating what the advantages, disadvantages and potential challenges of the online access process

are; in the light of the results, online access will be examined as a challenge for archives, archivists or archival material.

**Keywords:** Online Access, Challenge, Archives, Archivists, Archival material

## **Online chat reference services: successes and failures**

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**Abstract:** In this study, we analyze online reference chat transcripts of the past two years from a central reference desk of a research library to determine the proportion of questions that are answered successfully. For unsuccessful reference requests, we will determine the causes for failure and as they may relate to collection development, reference service quality, and information literacy and search competencies of library users. The paper will also give some suggestions for improvements in this service.

## **Open Access impact on the visibility of science**

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**Abstract:** The article approaches the visibility of science using bibliometrics indicators. Based on data from "Web of Science" and SCImago Journal & Country Rank it analyzes scientific productivity of Romania and Moldova. It presents the benefits of open access for researchers, universities and countries. It examines also the opinions of researchers from the Transilvania University of Brasov and Moldova universities regarding the benefit of open access to scientific visibility.

**Keywords:** Open access, Visibility, SCIMAGO, Republic of Moldova, Romania

## **Open access policymaking: roles for academic librarians as “change agents” in research institutions**

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**Abstract:** Many institutions have voted to pass open access policies. It has often been stated that a “faculty champion” needs to be identified in order for any policy to move successfully through various stakeholder groups in the university. Librarians have been warned not to make open access policymaking a “library issue.” At the same time,

academic librarians already possess demonstrated expertise in repository development, have established liaison relationships with departmental faculty, and are most likely to have deep knowledge of scholarly communication and publishing trends. It would seem that librarians could leverage this expertise and experience by taking on open access leadership roles in the wider institution. Academic libraries may be missing an opportunity to be true change agents in transforming organizational culture around the scholarship practices in their institutions. RutgersUniversity, working through a small Senate open access subcommittee with librarian leadership provided by the authors, successfully passed an open access policy resolution in October, 2012. Strategies that led to success in passing the policy resolution at RutgersUniversity are detailed. Academic librarians, in partnering with departmental faculty on open access policymaking allow the library to continue to develop important new strategic directions and enhanced levels of engagement across their universities. Librarians can be effective as the leaders in these important open access initiatives.

**Keywords:** Open access, Organizational change, Open access policymaking, Academic library roles, Creating change

## **Perception towards cataloging as a subject in curriculum: a preliminary study**

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**Abstract:** The research study is about student's perception towards cataloging subject in an organization of information. The research method will be done through survey or questionnaire. The respondents of the research study are from the student in Universiti Teknologi Mara (UiTM), Universiti Islam Antarabangsa (UIA), Universiti Malaya (UM) and Unisel (private college). They are from current and enrolled students. Previous students who are already seat for this subject also will be tested. They will involve the whole FIM branches in Malaysia. Cataloging is the most crucial course in the area of organization of information. This study aims to examine the perception of students towards the cataloging subject which comprising the subject of Descriptive Cataloging and Subject Cataloging and Classification. It is important to investigate the student's perception in learning the cataloging subject. Subject Cataloging and Classification in an organization of information is a major heart of library science. It is important to learn in order to ensure that the library materials in information centers are really organized and classified. Here is the technical part of cataloging area. Students are seems to be demotivated to seat for this subject. They are the students from semester 4 and elective students from semester 5. The students also have a negative perception towards this cataloging subject through out the semester. Besides they always have a judgment of subject's failure at the end of the semester. Estimation for the research study will determine positive or negative perception towards the cataloging subject. Finally the research will have a discussion or suggestion to motivate the students so that they will take the cataloging subject as a challenge.

**Keywords:** Cataloging, Descriptive cataloging, Subject cataloging, Classification, Library Science

## **Perceptions of individual and societal value of public libraries in the Netherlands: findings from a quantitative study**

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**Abstract:** In this paper we present the findings of a quantitative study on the outcomes of the public library as perceived by the Dutch population. This study is the third stage in a methodological research program that aims to develop a valid and reliable (set of) research instrument(s) for demonstrating the societal value of public libraries.

In September 2012 a questionnaire was administered among a representative sample of 1.500 Dutch citizens ranging in age from 13 to 87. The questionnaire covered five domains of possible library impact that were distinguished in the previous research stages (that consisted of a literature review and qualitative study): educational, cultural, social, economical and affective. Respondents were asked whether they recognise the public library's contribution to societal welfare in the benefits they themselves (could) derive from this institution in these fields.

**Keywords:** Public libraries, Outcome measurement, Societal value, Social return on investment

## **Perceptions of public libraries in Europe: report of a cross-European study**

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**Abstract:** This paper presents, for the first time before an academic audience, the results of the largest ever public library perceptions study (involving surveys of the general population, public library users and library public access computer users in 17 European Union countries). The surveys were commissioned by the Global Libraries Initiative of the Bill and Melinda Gates Foundation and were conducted by TNS-BMRB between October and December 2012. These surveys covered more than 35,000 respondents and were supplemented by more than fifty focus groups to gather an in-depth picture across the selection of EU countries. The countries covered account for over 90% of the European Communities' population.

The aim of this study was to understand the impact that public libraries in the EU have on users' lives, in the hope that the data can be used for advocacy purposes. Accordingly, the question areas, especially in the interviews with public access computer users, were closely linked to EC priorities, covering such areas as

- ICT skills (especially those relevant for employment)
- Employment

- Non-Formal and Informal learning
- Social inclusion - engaging with hard to reach groups

The digital divide - public libraries providing free access to digital skills/resources to deliver an inclusive digital single market for content, products and services

- Communication
- E-government and civic engagement/active citizenship
- Innovative services and partnerships

The paper reports key project findings on the perceived value of public libraries, as well as the levels of library and public access computer use, before turning attention to how public access computers are used to find and apply information in the EC priority areas. Some implications of this work for policy makers and public library advocates are presented by the authors, who were all heavily involved in managing this important programme.

**Keywords:** European Union, Europe, Public libraries, User perceptions, Surveys, Focus groups, Public access computer users

## Performance of the Focus Group and of Group Verbal Protocol in the Assessment of Controlled Vocabulary in Physical Therapy: A Qualitative-Cognitive Study *Vera Regina Casari Boccato<sup>1</sup> and Estela Maris Ferreira<sup>2</sup>*

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**Abstract:** The performance of the focus group and the group verbal protocol is compared in the evaluation of controlled vocabulary in Health Sciences, category of Physical Therapy, in an information retrieval system specializing in the cognitive context of virtual library users. The data were collected from the focus group and the group verbal protocol by two professors, two graduate students and two undergraduate students from the Department of Physical Therapy, Federal University of São Carlos (UFSCar), Brazil, totaling six participants, who used the DeCS - Health Sciences Descriptors controlled vocabulary for retrieval by subject in the LILACS - Latin American and Caribbean Health Sciences Literature database of the Virtual Health Library of BIREME - Latin-American and Caribbean Center on Health Sciences Information. The statements of the participants were recorded and transcribed verbatim, after which five categories were elected to analyze the data: 1) Importance/Knowledge of DeCS vocabulary; 2) Performance of the controlled vocabulary in the retrieval information process; 3) Update/improvement of the DeCS controlled vocabulary; 4) User participation in the process of building and updating the DeCS; and 5) Need for the construction of the category of Physical Therapy in the DeCS. The results indicated that the focus group and the group verbal protocol both showed satisfactory performance in the evaluation of the DeCS, category of Physical Therapy, although the results of the focus group were more consistent with the categories of analysis, particularly those related to: (a) the participants' recognition of the importance of using DeCS in retrieving useful information from the

LILACS database; (b) the need to improve the DeCS vocabulary; and (c) the construction of a specific category for Physical Therapy. Our conclusion is that the use of introspective data collection techniques contributes significantly to qualitative research for the improvement of controlled vocabularies, based on the views of expert users of virtual library databases. This work is complemented with the proposal of a methodology for the collection of qualitative data using a cognitive approach, called "Focus Protocol," which is indicated for use in assessment studies of controlled vocabularies in Health Sciences as well as in other contexts.

**Keywords:** Focus group, Group verbal protocol, Controlled vocabulary, Physical therapy, Virtual Health Library, Cognitive-Qualitative methodology

## **Perspectives on the investigation about the organization of information of digital photography for the digital library**

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**Abstract:** Currently, libraries and their collections are established by a wide variety of resources, which demands the application of an effective description to offer access to information. Photography is included in these collections, particularly, digital photography which has had a bigger presence during the last three decades.

Combined with technological advances, the digital library is incorporating into its collections the electronic resources and collections derived from the traditional ones. Not as a substitution, but to improve and offer other types of services and ways to access the catalog, as well as to offer the use of different tools, called "discovery tools". The investigation in this area of study is based on an important foundation, the use of traditional techniques such as documentary investigation. This allows to establish a critical guidance instrument to choose authors and sources to be analyzed in the following phases of investigation. The subject of digital photography analyzed from librarianship has two linked ideas. On one side, the perspective of the organization of information and, on the other, the study of the photograph as an image. The latter constantly represents a multidimensional approach to consider due to the relation of this object of study with its own development as a work of art and the aesthetics, technological, and artistic techniques, as well as the graphic language, visual analysis theories, evolution of professional technique, visual communication, etc. Regarding the organization of information and fulfilling the idea that at a doctorate's level, the student acquires the tools to generate new knowledge and critical thinking, another approach has been applied. Such approach leads to the observation, description, and analysis of the important changes in the theory for the representation of documentary entities in the library catalog, and the guidelines that regulate the description in the scope of Librarianship and Information Studies.

Therefore, content analysis of the basic tools for library description, such as *Anglo-American Rules of Cataloguing* (RCA2r 2004) and the code *RDA: Resources Description & Access* (2011), leads to the qualitative analysis of the relevance to describe electronic resources, specifically, digital photography. Besides, elements that may be inadequate considering the own characteristics of digital photography are expected to be



identified. On the other hand, until now, documentary entities are registered in the catalog considering the library description model, resulting in the identification of the main investigations about models of Entity-Relation (ER). This will help establish the model that will allow generalizations regarding the relations kept by digital photography as a work, manifestation, expression, and item. The model is mainly linked to the use of tools for its description and access in the digital scope.

## **PhD students in the humanities: understanding the information behaviour of graduate Information Literacy course participants**

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**Abstract:** The study examines whether an information literacy module/course is a useful and appropriate method of intervention during the initial months of a humanities PhD, and if there is more that can be learned from the course participants that can provide a better understanding of their information behaviour. This can enable the Library to further develop its approach to supporting them.

**Background:** UCC Library has been providing an accredited and assessed information literacy module (5 ECTS) as part of the University's structured PhD programmes since 2008. At the outset, the module content was compiled primarily with a Science, Engineering and Health Sciences audience in mind. In 2011 the content was re-imagined for the purposes of delivering it to PhDs within the College of Arts, Celtic Studies and Social Sciences. The course includes fifteen hours class-contact time in addition to substantial online support material. This study uses the module as a platform from which the information seeking needs and behaviour of first year humanities PhD students can be examined and better understood. This can inform how librarians can better support humanities researchers, not just in terms of adapting the module further, but by suggesting other possible interventions. The research is novel, in that it is based around an established and accredited module that has already been adapted in various ways in terms of content and timing of delivery. Drawing on Kuhlthau's 'Information Search Process', the study seeks a deeper understanding of a specific group during the initial months of their PhD research.

**Methodology:** A questionnaire was distributed to all course participants at the outset of their PhD studies (prior to their attending the module). This questionnaire set out to examine general perceptions regarding their research topic, and how they intended to meet their information needs. A second questionnaire was distributed to those who had completed the module. Interviews were held with six participants to gain a richer understanding of how their information needs had evolved during the initial stages of their PhD.

**Results:** Despite the relatively generic nature of the PG6009 module, and the diversity of humanities research (as evidenced by the literature review) the course had clear benefits for the participants. The study confirmed that first year is a time when PhD researchers in the humanities are scoping and changing topics. Learning how to narrow their topic and manage information poses a challenge. Other people play a crucial role in helping them to bridge these gaps. The participants reported that the most appropriate time to attend this module is during the initial months of the PhD. Some preferred to attend particular

units later as stand-alone workshops. The most valued elements of the module included resource discovery, effective use of the web, and critical appraisal. There is scope for further one-to-one contact with librarians and additional follow-up sessions on specific topics.

**Keywords:** Information Literacy, Information behaviour, PhD students, Humanities

## **PIOP's museums network and library: cultural economics**

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**Abstract:** Standing at a crossroads, in a critical era and from a post related to providing information of any kind, writers focus their research on information itself and the formulation of new conditions related to access and dissemination of information in the field of cultural heritage institutions.

The Piraeus Bank Group Cultural Foundation (PIOP) is a non-profit institution that aims to safeguard record, study and promote the traditional technology and industrial culture of Greece. PIOP realises its statutory goals by conducting research on traditional craftsmanship, industrial archaeology, inventorying their remnants, and disseminating the results by any available means. In this context, the creation and functioning of a Network of thematic technological Museums covering the whole of Greece constitutes an essential tool. Each of these museums highlights the diverse aspects of a productive activity that upheld the economy and stamped the identity of the corresponding region. Under the scope of empowering local communities by activating sustainable development in the Greek periphery, PIOP organizes cultural public outreach activities in the Museums Network: temporary exhibitions, educational programmes, lectures, seminars, craftsmanship presentations, film screenings, dance, music, story-telling etc. To the present, the Network comprises seven operating museums, while two more are “on the making”: their creation has been financed by E.U. Programmes (European funding and national funds) and by the Piraeus Bank Group, and their functioning is financed by the Piraeus Bank.

PIOP, operating a network of museums, a variety of research programs, various publications and a central library specialized, among other fields, in cultural heritage, museology and economic history, is trying to overcome the consequences of the ongoing economic crisis on cultural production and society's relation to cultural activities, by active participation and involvement in the Information Society, where the key issue is the need for direct access to provided information.

**Keywords:** Museums network (PIOP), Library (PIOP), Cultural economics, Information society

# **Predictors of legislators' adoption and use of ICT in the performance of legislative functions in the Nigerian National Assembly**

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**Abstract:** Several studies have looked at trends of adoption and use of technology to explain the transformations that people have had with technology. A digital culture is growing and new social orders emerging. These transformations have led to varying forms of e-democracy and e-parliaments mostly in countries of America, Europe where legislators have considerably used ICT to grow an e-parliament culture, forming of new relationships amongst legislators and with citizens thereby strengthening representative democracy (Malloy, 2003; Norton, 2007; Nyambe, 2007; World e-parliament reports 2008, 2009 & 2010). However, this does not appear to be the case in the Nigerian National Assembly (NASS). Literature shows a culture of corruption, absence of transparency, lack of citizen participation in governance (Daily Trust, 2012). The purpose of this on-going PhD thesis is to investigate the predictors of acceptance and use of e-parliament by legislators in Nigeria. The theoretical framework for the study will be an extension of the Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh, Morris, Davis and Davis (2003). A dominantly positivist paradigm with quantitative and qualitative approaches will be used. The population is in two categories - all 469 federal legislators and 7 principal officers. All federal legislators will participate in the survey using a questionnaire and an in-depth interview of 7 principal officers. A test-retest reliability will be carried out and results subjected to a Cronbach Alpha. Pearson Product Moment Correlation and Delphi techniques will be used for quantitative and qualitative data respectively. The study will evolve an e-parliament model; shed light on culture and technology; test and extend theory on technology adoption.

**Keywords:** E-parliaments, Use of ICT, UTAUT, Technology adoption, Positivist paradigm

# **Preferences of digital information resource and evaluation criteria used by the of final year undergraduates in the Faculties of Engineering and Veterinary Sciences: a comparative study**

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**Abstract:** The purpose of this paper is to present part of the findings of a major study carried out to assess the information seeking and research strategies of the undergraduates of University of Peradeniya, Sri Lanka. A stratified random sample of second to third years undergraduates were considered for the full survey. In general a 10 per cent of the total population in each faculty was considered but when the 10 per cent sample covered less than 25 students, the sample was increased to 25 per cent to obtain a more accurate and representative insights in to the research topic. Accordingly 10 percent (37 students) of the final year students of the Faculty of Engineering and 25 per cent (17 students) of

the final year students of the Faculty of Vet Science were considered for this paper. Quantitative data were gathered using a six page structured questionnaire consisting of 20 questions. This survey instrument is mainly based on Head and Eisenberg's (2010) survey but the terminology and the format was revised to suit the Sri Lankan context. Data were gathered about the biographic details, types of assignments the students have to answer, frequency of consulting human, print and e-resources, methods used to evaluate them, use of e-productivity tools, preferred research styles and the difficulties in the research process difficulty of tasks involved in the research process as well as their access to computers, training received in using digital and other information sources, details of the training programmes, and what topics they would like to follow if the library to offer a programme. Since it was not possible to identify the e-mail addresses of all the students a printed version of the questionnaire was administered through the faculty library from 5<sup>th</sup> December 2012 and the data collection was completed within one month. Since the questionnaire gathered data on personal preferences of the sample, the findings are mostly based on their preferences, but to achieve triangulation, faculty handbooks, annual reports, web sites and a select group of academics were consulted. Findings concentrating on a limited area of the main survey will elaborate comparatively on the preferences of digital resources and evaluative criteria and the people approached for help. It is expected that the findings will throw significant light on the information seeking and research strategies of the undergraduates which could be used to identify their strengths and weaknesses so that the library can plan information literacy programmes in future to address their needs.

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## **Primary source material relating to the Tudors within the City of London**

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**Abstract:** The purpose of this study was to identify and examine primary-source materials in the London area related to the Tudor dynasty. The location, value and/or historical importance of each item was noted, as well as any preservation efforts. The Tudor monarchy reigned over some of the most tumultuous times in English history and the proper way to go about educating oneself on Tudor history is to locate and research primary-source materials related directly to that time period with a clear emphasis on materials that were either directly connected to the monarchs specifically or materials that can be attributed to them such as portraits painted of them in their lifetime. Reading documents written in the hand of Queen Elizabeth I can connect a historian to the power her hand yielded; studying a portrait of King Henry VIII allows one to feel the power and strength emanating from his stance in the portrait. Viewing and reading Edward VI's Devise of Succession with the child-like handwriting of a sickly boy king is incredibly powerful because one can sense the tremendous pressure he must have been under up to the point of his death. Each document, portrait, book and personal possession can provide historians with a piece of history that has the power and capability to inform us of the times when the Tudor dynasty ruled over England.

# Public administration approach: what do libraries need for consistent information services evaluation

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**Abstract:** Public administration treats evaluation as tool for evidence-based decision making. During the last few decades evaluation “boom” is observed in different parts of the world and sectors. Public sector organizations opened themselves for performance evaluation and measurement striving to create higher level public services for customers vs citizens. Comparing evaluation to other instruments of public management (performance/internal audit, activity management), it is possible to maintain that it is not provided with the authority mandate, as the most often the *description, measure, research or service* concepts are used because it is necessary to plan the financing of evaluation, which is not a part of the organizational infrastructure.

The following main evaluation functions are distinguished: improvement of strategic planning; accountability; knowledge production; marketing; community consolidation; enlightening and learning. The present research emphasizes that users of evaluation attempt to ensure several functions. The choice of the functions depends on the aim of the user of evaluation information, evaluation type or even the approaches of evaluation organization in the country.

For assessment of library performance we check validation the four-level approach, which consists of following elements: infrastructure of library; innovativeness of library; human resources; quality of the place.

Valuing information, evaluation of information services as well as overall public sector performance and its results is still challenging for libraries all over the world. Articulating and demonstrating the value and impact of information is still a major challenge for information management. It makes particular difficulties for developing an adequate institutional management and library administration. Lot of efforts to find the best ways for creating and implementing evaluation culture for information institutions, including libraries, are made.

The *aim* of the paper is to define the problem of library evaluation as significant part of institutional evidence-based management from public administration approach. In order to fulfilling those tasks, special attention to present the concepts of valuing information, library performance evaluation, measurement etc. is drawn. Economic aspects of information services versus intellectual ones are discussed. Consistent patterns and principles of public administration as well as possibilities of public administration influence in creation of systematic base of library performance evaluation as well as of information services impact to the user are analysed.

**Keywords:** Library, Public administration, Performance, Evaluation, Value

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## **Public libraries in Serbia and online services they provide**

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**Abstract:** The subject of this paper is the services provided by public libraries in Serbia. Public libraries in Serbia operate in accordance with the Law on Library and Information Activities (2011). The library service in Serbia is charged for and only certain categories of users are exempt from payment (disabled people, blood donors). We certainly should also mention the campaigns with the aim of promoting books and reading, which are conducted by most of the public libraries in Serbia, namely the campaign of free subscription for first graders.

We analysed the access web pages of libraries and monitored the following data:

how many libraries have their own websites,  
how frequently the data are updated,  
what information is provided to users,  
how many libraries offer search of the OPAC catalogue,  
how many libraries have digital collections,  
use of social networks in library operation,  
“Ask your librarian” services and online surveys.

At the same time, we monitored the data on the type of database use and the Internet access for library users and whether the member card allows users to use the Internet daily for some time free of charge or whether this service is charged for. We certainly should also mention the examples of certain categories of users being trained in some libraries in the use of information and communication technologies.

**Keywords:** Public libraries, Open access, Digital collections

## **Pushing the boundaries: analysis of research projects undertaken in the International Digital Library Learning programme**

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**Abstract:** The International Master in Digital Library Learning (DILL) is a two-year collaborative master program between *Oslo and Akershus University College* of Applied Sciences in Norway, Tallinn University in Estonia and Parma University in Italy which was supported in the framework of the European Union (EU) Erasmus Mundus programme. The program is designed to prepare a group of students from European and third countries, including librarians, archivists, curators, administrators and technologists, who have or will have responsibility for managing digital conversion programs and/or implementing digital libraries and conducting digital library education programs to work in the complex world of digital libraries. The students acquire a joint Master's degree (120 ECTS) which is recognised by all three partners.

The first three terms consist of six modules, each amounting to 15 ECTS. In the first semester in Norway two modules are offered: (1) Research Methods and Theory of Science and (2) Digital Documents. In the second semester in Estonia the following modules are offered: (1) Information and Knowledge Management and (2) Human Resource Management. In the third semester in Italy two modules are offered: (1) Access to Digital Libraries and (2) Usage of Digital Libraries: Quantitative and Qualitative Evaluation.

In the last term the students write their Master's Thesis amounting to 30 ECTS. Students can choose to write their Master's thesis at either of the three partner institutions; this depends on the topic and the location of the main supervisor. As the degree programme has been in existence for 2007, a significant number of final theses have now been completed. Analysis of these research dissertations provides insight into the issues in the digital library environment which are perceived as being important and interesting by students, methodologies that have been considered appropriate to apply and preferred research paradigms. Taken as a whole, the body of knowledge represented by these works can be seen as documenting attempts to push the boundaries of our digital library environment by new professionals. Thus, the analysis of research projects undertaken in the International Digital Library Learning programme is provided in this paper.

**Keywords:** Erasmus Mundus International Master Program Digital Library Learning, MA Thesis, Analysis

## **Qualitative and quantitative methods for building a digital literacy assessment tool for librarians**

*Mei-Mei Wu, Ju-Hsiu Kuo*

**Abstract:** Over the years, librarians, particularly academic librarians view that one of their major tasks being to promote patrons' information literacy competency. In order to promote patron's information literacy, librarians may need particularly literacy skills for conducting the tasks as literacy educator. Yet, the librarians' perception of digital literacy and the need of patron's literacy education are not clear. How about librarian's perception of our own digital literacy competencies? This research proposes both qualitative and quantitative approach to determine academic librarian's perception as well as competency of digital literacy and then a digital literacy assessment tool is proposed based on the results of the qualitative method. Content analysis is applied to draft a framework for digital literacy concepts; semi-structured interview is applied to seek for the academic librarians for their perception of digital literacy as well their view of the need for patron's literacy education. The results include a conceptual map of librarians' view of digital literacy as well as a result of librarians' digital literacy assessment. The

contributions of this study are twofold. Firstly, a theoretical contribution in that conceptual framework of librarian digital literacy has been developed. Secondly, a methodological contribution that digital literacy assessment tool has been developed by using multiple research approach demonstrates the satisfaction of the methodology.

**Keywords:** Librarians Literacy, Digital Literacy, Information Literacy, Research Literacy, Library instruction, Bibliographic instruction

## **Qualitative library services @ user's satisfaction: a study of NINE Library, PGIMER, Chandigarh**

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**Abstract:** Quality is a significant element of production or services in keeping the users satisfied. There different opinions and competing views of the term quality by different people and the common element of the business definitions is that the quality of a product or service refers to the perception of the degree to which the product or service meets the users expectations. Quality is an ideology which is focused on the satisfaction of the users needs. The libraries as a services organization try as much as possible to meet or exceed user's expectation in their day to day activities and also their further development. Libraries and information centers offer a variety of information services to their clientele and try to satisfy them with qualitative services.

The present study focuses on the determination of Users perception of Library service quality at the NINE, PGIMER library. The objectives were: to identify expectations of students of the PGIMER; to identify the perceptions of students of the NINE, PGIMER and to measure and compare the expectations and perceptions of students using the score of various dimensions of SERVQUAL scale.

Users perceptions were determined by means of a quantitative survey conducted at the NINE, PGIMER Library using the self-administered SERVQUAL questionnaire. 118 respondents were surveyed. Data was analyzed using descriptive and inferential statistics. The questionnaire measured students' expectations and perceptions in five dimensions of service that consists of reliability, assurance, tangibles, responsiveness and empathy.

The results revealed that in three of the five SERVQUAL dimensions, there was a negative quality gap. The largest gap was in the tangibles dimension. Also, there were significant differences between perceptions and expectations of students in most of SERVQUAL dimensions ( $p < 0.001$ ) Improvements are needed across three dimensions. Results have shown that students' perception of service quality at the NINE, PGIMER falls below their expectations, presenting a great challenge to the library. In order to improve service quality, it is recommended that the Library regularly assesses its resources, infrastructure and employees, as well as Users' experiences and provide swift response to fulfill their needs.

This paper discusses the parameters of user's satisfaction and effect of librarian's attitude and behavior, Library collection, Library timings, Computer facilities, Internet facilities, Inter Library Loan services, circulation services, Photo copy services, Answering of Users Queries, Book reservation Services, Reading room facilities, Staff attitude and behavior, Library building atmosphere etc.



## Quality audits as a tool for quality improvement in selected European higher education libraries

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**Abstract:** From the beginning of the 1990's, different types of quality management and evaluation systems have become integrated into higher education institutes throughout Europe due to the creation of the European Higher Education Area (EHEA). This has meant that the university libraries have had to learn how to evaluate their services and improve their quality. Quality audits are one tool that can be used in quality management approaches to assess how well an organization is being managed. This paper describes and benchmarks the use of external and internal auditing in three European academic libraries, i.e. the Medical Library of the University Medical Center Hamburg-Eppendorf (Germany), the Universitat Autònoma de Barcelona Library (Spain) and the University of Eastern Finland Library (Finland). The results reveal the best practices of auditing in these institutions; and recommendations are provided for the further development of library auditing and ways to improve co-operation between libraries.

**Keywords:** Academic libraries, Quality management, Evaluation, Quality audit, Europe

## Quality measurement at Radboud University Nijmegen Library

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**Abstract:** The library of the Radboud University Nijmegen uses an elaborate system of quality measurement. The library has defined key aspects of its performance and measures these each year as key performance indicators. Some of these come from administrative systems, others are gathered in short user web surveys. These are supplemented by targeted user surveys of faculty and students. The library also participates in the national benchmark exercise of Dutch academic libraries.

This system of quality measurement is in place a couple of years now and yields good results on which decisions for improving our services can be based. We would like to supplement this system in the future by more impact related measures.

**Keywords:** Quality measurement, Academic libraries, Key performance indicators, Benchmarks, User surveys

## Quality of metadata in Dublin Core and Metadata Object Description Schema

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**Abstract:** Quality of metadata is crucial for discovery of digital objects. Insufficient quality of metadata does not only have impact on discovery, but also reduce the efficiency of describing and identifying digital objects, and metadata interoperability. The aim of this study is to comparing the quality of metadata in Dublin Core (DC) and Metadata Object Description Schema (MODS).

Metadata created in digital archive projects from three Taiwanese institutes; National Chung-hsing University, National Museum of Natural Science and Council of Agriculture of Executive Yuan were included in this study. All the records were converted to both DC and MODS. Quality check on completeness, consistence and correctness were carried out to compare the feasibility of the designated mark-up schemas.

The author found, there are lack proper DC elements to record information about part, extension, target audience and recording information of digital objects; insufficient and blurred description on element definition of DC cause inconsistency in use of elements; inconsistency might cause incorrectness in describing digital objects. The results show that MODS provides more efficient mark-up schema than DC for describing details information.

**Keywords:** Dublin Core, DC, Metadata Object Description Schema, MODS, Metadata quality

## Quality of services assessment at public Libraries of Bam in Iran from the viewpoint of its users

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**Abstract:** This study examines the quality of services public Libraries of Kerman Province in Iran from the viewpoint of its users.

**Methods:** The research method is analytical survey. The Data collection has been done through a modified version of SERVQUAL questionnaire. 2932 men and 4206 women were the active users of 11 public libraries in Bam.

**Findings:** The libraries at expected and observed levels were examined. Findings showed significant difference between two (expected and observed) levels, meaning that users' expectations has not been met. The most significant difference related to "appropriate collection of information resources". The results also showed there was no significant difference between different users' opinions about the quality of services. Findings also showed that "relevant information services" was the priority of users. There was a correlation between the rate at which the library conformed to the users' expectations of quality.

**Keywords:** Public Libraries, Iran, Bam, SERVQUAL

# **The quality of services of Warsaw public media libraries – in youth's view. Research by the SERVQUAL method**

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**Abstract:** The paper presents the results of research conducted in 2012 in three Warsaw multimedia libraries. The subject of the study was to assess the quality of library services for young people in secondary schools and high schools. In the study there was used SERVQUAL method, based on measuring the gap between perceived quality and expected quality of the service. The quality of service was analyzed in the context of nine determinants. The assessment included *inter alia*: library staff, resources, interior spaces.

**Keywords:** Library service quality, Media library, Multimedia, Needs assessment, Public library, Quality, SERVQUAL

# **Quantitative and qualitative methods applied in comparative student reading habits and book buying research**

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**Abstract:** The objective of this research is to analyze the main aspects of reading habits and book purchasing behavior of university students. In the past, numerous studies on reading behavior have been carried out which involved individual countries and Europe as a whole. These studies allowed us to define the general framework of the phenomenon and to distinguish readers based on: age, place of residence, gender, occupation and other socio-demographic variables.

However, university student population has never been specifically investigated, particularly regarding the behavior of voluntary reading (i.e. autonomous and independent reading of the books not related to exams). This study aims to fill this gap.

The authors will present a theoretical framework and outcomes of a pilot study comparatively conducted in November and December of 2012 in Pisa, Italy and Zadar, Croatia. Authors argue that the combination of qualitative and quantitative methods is a way to find out interesting answers to research questions related to dependence of reading habits research and books buying.

The paper consists of two main parts.

The first part will discuss the theoretical framework based upon the slow but constant use of qualitative research in social sciences, namely in information science and marketing in respective countries.

The second part will present the results of a pilot study based upon quantitative and qualitative methods used in the comparative study of university students' habits in book

buying and reading in Pisa, Italy (total 55.000 students, sample of 530 students and Zadar, Croatia (total 5.500 students, sample of 193 students).

The pilot study methodology and research results will be presented.

**Keywords:** Reading habits, Book buying, University students, Voluntary reading, Purchasing behavior, Book reading, Quantitative methods, Qualitative methods

## **A quantitative analysis of IT facilities in Pakistani university libraries**

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**Abstract:** Digital Libraries are the recent gateway of modern knowledge and information. In order to make progress in the academic field, it is essential that quality digital library services be provided by the Universities. Higher Education Commission has endeavored to provide access to the most recent digital data bases in the last decade. Access to information and scientific data bases has increased in the universities of Pakistan on a large scale.

**Purpose:**

This paper is about the digital library services being provided in the university libraries of Pakistan. In a form of quantitative analysis, it summarizes the current services offered in the university libraries.

**Design/Methodology:**

A questionnaire was developed by Higher Education Commission. It was delivered to all public/private universities and degree awarding institutions of Pakistan. The response was sought on the specific categories of Library Management Software, Types of Computers, Total No. of Computers, Printout and Wi-Fi facility.

**Findings:**

This paper depicts the digital library services provided in the university and degree awarding institutions all over the Pakistan. It presents a pen picture of digital library services use in the Pakistani context.

**Practical Implication:**

It would help the concerned authorities to have glimpse of digital library services in the universities and degree awarding institutions. They can improve the current facilities after going through this paper. Moreover, the students and teachers would get awareness of the nature of digital library services at higher education level.

**Keywords:** Degree awarding institutions, Public/private universities, Higher Education Commission, Digital library services

## **Quantitative efficiency and effectiveness factors for electronic resource evaluation in academic libraries**

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**Abstract:** Electronic resource evaluation has been significantly subject of attention in the academic libraries in the last decades. Surveys and requirements assessment from faculty members have been the typical methods for scientific electronic resources acquisition in Iranian universities and research institutes. In this method, a number of databases or electronic resources are selected and subscribed by each institute, which might not be the best choice for researchers despite the high number of clicks or even downloads from these resources.

We propose to perform the resource evaluation based on quantitative analysis methods for calculating the effectiveness and efficiency of every resource. In this study, a number of institutes has been selected whose usage statistics (article downloads) in a set of selected electronic resources namely, Elsevier journals through ScienceDirect, Springer journals through SpringerLink and American Society of Chemistry journals through ACS site are used. The proportion of number of references from those resources used by the researchers in the same institute based on Scopus reports to the number of downloads is introduced as the Effectiveness factor. It means which percent of documents which have been seen are really used in the research process. The next step is to calculate the efficiency factor for each electronic resource. We propose to introduce the proportion of the number of references to the subscription fee of each institute as the efficiency factor. Our results for three different institutes show that proposed efficiency and effectiveness factors can be employed as evaluation criteria for selecting the required resources in the library.

**Keywords:** Library acquisition, Electronic resources evaluation, Electronic resource effectiveness, Electronic resource efficiency

## **A quantitative evaluation of library services at the GulfUniversity for Science and Technology Library in Kuwait**

*Awadh Alharbi*

**Abstract:** Libraries, like all sections of major universities, are now required to vie for funding. They are therefore called upon to justify their expenditure, and even their existence. The main focus of this study is to provide a complete and thorough quantitative evaluation of the GUST library in Kuwait, based on several factors of library usage. The study used a quantitative approach in its evaluation of library services. Questionnaires were issued to library students in order to collect the data. The study found that library users had positive opinions regarding the quality of the IT equipment in the academic library.

## **Quantity and quality of multiculturalism in libraries (Development of information and knowledge services on the public library)**

*Nada Arbutina, Stanka Jovicic*

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**Abstract:** Originally, the term of multiculturalism referred to the political field of action, but in the last decade of 20<sup>th</sup> century it made its way in humanities and thus in a library theory as well. Essentially, multiculturalism refers to equal possibilities accompanied by cultural diversities in an atmosphere of tolerance.

Generally we declare ourselves as supporters of multiculturalism in society and at institution level, and our everyday practice usually proves that such claim is correct. Though, any claim that has an intention to be scientific must be supported by data, statistical analysis, numerical indicators, and the problem occurs when we attempt to determine the level of national, cultural, religious or any other diversity in our libraries. This problem will be analyzed from the point of statistical librarian methods.

The subject, from the professional point of view, will also be considered from three aspects: employments in libraries, users and services (libraries for everyone, with no exception) and collections (as a subject in the collections as well as multiculturalism in variety of authors).

**Keywords:** Quality of services, Library, Multiculturalism, Users, Culture, Diversities, Statistics, Statistical methods, Measuring, Reports, Information and knowledge, Managerial techniques

## **The questionable impact of special grants**

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**Abstract:** Consider the ramifications of research that confirms the ineffectiveness of special subsidies intended to redress shortfalls in past funding for university libraries. The quantitative analysis in question was conducted on the basis of library expenditures by fifteen universities in the Province of Ontario, Canada, over the eleven years from 1975/76 to 1985/86. These statistics were then compared with those for the two subsequent years, when a designated \$25 million provincial government library enhancement subsidy known as the University Excellence Fund was introduced. Extended to a further third year, analysis also then measured the results observed when special funding conditions were removed and the money was integrated into regular university revenue. This research employed a public finance theoretical framework.

Substantiating earlier work conducted in other jurisdictions, the pattern of university expenditures on academic libraries in Ontario in the period examined reflects relatively fixed percentages, rarely varying outside a range of three-tenths of one per cent. In general, special subsidies failed to encourage expenditures on university libraries that exceeded the established patterns of past percentages of institutional support. University libraries in Ontario were no better off in 1987/88 than they would have been without the special subsidy. And they were worse off in 1988/89 than in 1985/86. In the aftermath of the current global economic downturn, if they are not already doing so, many university libraries will be soliciting special funding to redress earlier cutbacks. The lessons to be learned from this study are readily applicable to other political contexts.

**Keywords:** University libraries, Library budgets, Grants, Substitution of funds

## **RDA description of electronic and digital resources in the digital library**

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**Abstract:** The work focuses on examining the new order required in the digital library (DL) for organizing electronic and digital resources. Taking into account the theoretical principles underlying the current schemes for describing, we take up again the formal connections of the access points of author, title and subject and we contrast them against the model that governs *RDA: Resources Description & Access* (RDA 2011). Registration of attributes must be added to the mechanisms linking digital resources to adequate access of the digital library and which allow interconnection with the structure of the semantic Web, including Linked data. The research stresses the organization of information pertaining to electronic resources with digital features by using RDA.

**Keywords:** Digital library, Electronic resources, Digital resources, RDA, Linked data, Organization of information

## **Re-shaping information literacy instruction to enhance professional inquiry in problem based teacher education**

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**Abstract:** Knowing more about the critical attitudes, abilities and skills essential for inquiry, can help librarians and faculty as they plan and deliver meaningful information literacy programs. "Inquiry is not just something you do, it is a disposition that underlies all teaching" and learning. (Friesen, 2008). At the University of British Columbia, teacher candidates engage in inquiry to develop deep understandings of teaching. The purpose of this study was to examine students' critical engagement with pedagogical theory and determine how their synthesis of ideas plays a role in their learning to become teachers. Our goal was to determine what is meant by dispositions of inquiry in a Problem Based Learning Cohort (PBL) in teacher education. The study was conducted over two academic years and the investigators interviewed PBL teacher candidates, tutors, and resource persons (faculty) to identify and explicate their notions of inquiry and its role in learning to become a teacher. Following the questionnaire, the investigators conducted individual interviews with the PBL teacher candidates and examined their artefacts (case packages, presentations, and e-folios) to determine the ways in which teacher candidates develop questions for inquiry, identify and critically

use resources, and represent/communicate their understandings. In addition, interviews with the PBL tutors and resource persons (faculty) were also conducted to identify what factors the tutors and resource persons consider critical for teacher candidates' success. This session will provide an overview of the study and show how the research findings regarding the identification and critical use of resources are being used to re-shape our information literacy instruction.

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## **Re-skilling staff in ICT competency: imperative for the 21<sup>st</sup> century librarian in Ghana**

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**Abstract:** In this era of technological innovations in libraries, there is high demand on library staff to provide quality library services. The problem, however, is that many library skills were developed at a time when libraries were largely print- based resources, and the main function of staff was to acquire and process locally held resources and make them available to users manually. The transition from traditional, print-based library system to that of modern, ICT based library environment requires new and commensurate skills and knowledge to operate efficiently and effectively. The author will investigate the level of staff ICT competencies in academic libraries in Ghana. The study will be situated within the conceptual framework of evolution/modernization theory. Questionnaire will be used to collect the data that will form the basis of this research. Employees of two public university libraries and two private university libraries will be the subjects of this study. A comparative case study approach will be adopted in the analysis of findings. The conclusion will inform to a large extent staff recruitment policies of Ghanaian academic libraries.

## **Readability of text retrieved by search engines on different types of children's search queries: the case**

**of Google**

*Dania Bilal*



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**Abstract:** Children and adult users consider Google as their gateway to the Internet (Purcell, 2012; Druin, et al., 2010; Bilal, 2012; Foss, et al., 2012). Generally, search engines designed specifically for children (i.e., Yahoo! Kids, Ask Kids) index web documents that are deemed suitable for children's age levels. This is not the case for Google, Yahoo! or Bing as these engines are designed for use by the general public rather than by a specific group of users (Bilal, 2012). Web content contains text written at different levels of difficulty (Collins-Thompson, Bennett, White, del Chica, & Sontag, 2011; Kim, Collins-Thompson, Bennett, & Dumais, 2012), making the readability of text (snippet and corresponding web pages) by children (i.e., in middle schools) an important area of investigation. Studies have shown that while children enjoyed using Google, they were, in most cases, unable to interpret results retrieved by the engine (Druin, et al, 2009; Druin, et. al, 2010). Could the reading of web results be at the core of this difficulty?

The sheer volume of digital media and the large amount of information retrieved by search engines have contributed to a significant increase in research that analyzed the readability of text on the Web in the past few years (Benjamin, 2012). In 2010, Google initiated a feature that supports filtering search results by three Reading Levels: Basic, Intermediate, and Advanced. Google involved a group of teachers in rating the readability level of sample web pages and, subsequently, developed an algorithm that predicts the readability level of retrieved results (Schwartz, 2010). However, to date, scarce research has examined and compared the reading difficulty of results (snippet and corresponding text of web pages) Google retrieves on children's search queries and evaluated it against the Flesch Reading Ease and Flesch-Kincaid Grade Level formulae, two classic measures for assessing text difficulty. As Web content continues to increase in complexity and as children and other young users resort to Google for finding information, we need to develop understanding of how much of what this engine retrieves supports children's reading abilities. In this presentation, Bilal will report the preliminary findings of a study that evaluated (a) the reading difficulty of results Google retrieves on children's queries and filter by Reading Level and (b) compared Google's Reading Level of these results against the reading and grade level scores generated by the two Flesch measures.

Findings from this study have implications for Google's readability algorithm, text difficulty, and for personalizing information retrieval that best supports children's use of Google.

**Keywords:** Reading, Readability, Information retrieval, Search engines, Children, Youth, Middle school students, Search queries, Web search results, Text difficulty, Google, Reading level, Flesch Reading Ease Formula, Flesch-Kincaid Grade Level Formula

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Available: <http://www.seroundtable.com/google-reading-level-algorithm-12638.html>  
Accessed 2/13/2013.

## The real cost of manual collection analysis and assessment *Mark Tullós*

ProQuest

**Abstract:** Within academic libraries, we're witnessing a trend where collection development staff takes on projects to determine the value of their collections and how well they serve the university community. This is often a result of rising materials cost and increased budget pressure along with the need to justify current or increases in budget. The software tools presented to libraries to arrive at these metrics often provide only part of the picture such as analyzing holdings but not usage or focusing on print or electronic resources exclusively. In many situations, libraries maintain these statistics in homegrown or business applications like MS Excel. Through conference presentations, papers and anecdotes, we understand that any mix of these solutions, when applied, can help accelerate the completion of projects. However, these projects remain highly laborious and take the librarian away from critical community focused activities and dilute the power a library can provide from a service orientation.

In order to raise awareness to the need to further automate the collection of total material holdings and usage information to a new standard, ProQuest has furthered research that will surface a variety of projects completed by librarians over the last 7 years that inform their staff and management as to the value of their collection with regards to breadth and usage. Also of key interest is the cost of such projects in time and missed opportunity.

Finally, ProQuest will provide aggregate information on the utility of having highly automated collection analytics at the ready for librarians to better understand the use and value of their collection and how they can enact change more effectively.

## **Recruitment methods in the Information Technology Rural Librarian Master's Scholarship Program (Part I and Part II): implications of social justice in the southern and central Appalachian region**

*Bharat Mehra and Vandana Singh*

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**Abstract:** The Information Technology Rural Librarian Master's Scholarship Program Part I (ITRL) and Part II (ITRL2) are two grant projects funded by the Institute of Museum and Library Services' Laura Bush 21<sup>st</sup> Century Librarian Program to the School of Information Sciences (SIS) at the University of Tennessee (UT). The purpose of both is to recruit and train rural library paraprofessionals working in the Southern and Central Appalachian (SCA) region to complete their master's degree part-time in the UT SIS' synchronous distance education program. Sixteen ITRL students completed their graduate education from June 2010 – August 2012 combining work experience in regional libraries with a curriculum that focused in information technology (IT) and rural librarianship, while thirteen ITRL2 students will complete a similarly structured program from June 2013 – August 2015. This paper discusses the social justice implications in its analysis of the recruitment methods in the ITRL and ITRL2 that have been made to identify the best candidates from the rural SCA communities.

**Keywords:** Social justice, Information Technology Rural Librarian Master's Scholarship Program (Part I and Part II), ITRL, ITRL2

## **Reengineering from tradition to cloud teaching: an upcoming scenario for Library and Information Science (LIS)**

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**Abstract:** Cloud computing technology is still relatively young in terms of maturity and adoption in teaching in particular to Library and Information Science (LIS) education. The expectation is that it will undergo several changes in the future, in terms of resources, issues, risks, and ultimately best practices and standards to be adopted as Cloud teaching from Traditional teaching. This paper explores the application of cloud

computing in LIS education. The study aims to investigate the educational potential of cloud computing, and how it could be exploited in enhancing engagement among educational researchers and educators to better understand and improve their practice. The study also finds out how the cloud computing can deliver for originating a new instructional paradigm that makes a shift possible from the traditional practice of teaching as a private affair to a peer-reviewed transparent process in LIS. The development of cloud technologies are arousing great interest in educational environments and particularly in LIS. Study of the cloud computing in teaching and learning is beneficial to teachers and instructors considering enhancement of the curriculum of LIS. The paper will also identify the examples of cloud computing implementations already done in various LIS schools world over. It will further understand that how the full potential of cloud tools can be realized so that future educators and teachers of LIS can benefit from the technology.

## **Reference librarians' adoption of cloud computing technologies: an exploratory study**

*Lili Luo*

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**Abstract:** In recent years, cloud computing has become the “buzz” word in the world of information technologies. There are different service models for cloud computing, among which Software as a Service (SaaS) allows consumers to use computer software on a cloud infrastructure. In the area of reference services, SaaS is often used in virtual reference and research guides. Virtual reference software such as LibChat and QuestionPoint, and research guides such as LibGuides are all hosted on the cloud. They are specifically designed for libraries' reference service needs. In the meantime, there are also a variety of general-purposed, consumer-oriented SaaS tools that reference librarians can benefit from, such as cloud-based video services (e.g. YouTube), information collection services (e.g. Google Forms), and file sharing services (e.g. Dropbox). This paper seeks to examine reference librarians' adoption of these tools at work. Although these tools are not specifically developed for reference librarians, they still have great potential in supporting and facilitating reference work, especially for librarians with limited budgets and insufficient technical support. In addition, library users already use these tools in their daily lives. Sharing the same technology immersion experience with users provides librarians with a new perspective and enables them to successfully engage these tools in serving their user community. Overall, these tools, as a great entry-point for librarians to familiarize themselves with cloud computing technologies, will help demystify this seemingly technical concept and better prepare them for further migration to the cloud.

Online survey was employed as the data collection instrument. The study population was reference librarians in the United States. The non-probability sampling technique, “judgmental sampling” was used in sampling design. Subscribers to three most popular reference listservs, lib-ref, dig-ref, and ili-l, were judged to represent an inclusive subsection of the population, and the study subjects were selected from them. A survey invitation message was sent to the three listservs, calling for participation in the study. The survey remained open for three weeks, and a reminder was sent one week before the survey was closed. In the survey questionnaire, the respondents were asked about their experience of using the six types of SaaS tools discussed in the 2011 book titled “*Getting*

*started with cloud computing: A LITA guide*” by Corrado and Moulaison. In addition, respondents were asked to provide information on other types of SaaS tool they have used and to discuss the advantages and disadvantages of using SaaS tools to support and facilitate their work. Results of the study are currently being analyzed. The author hopes to share the findings with the international library community at QQML 2013, therefore helping library professionals further understand how to employ new innovations and technologies to enhance efficiency and effectiveness of their work and thus lead to optimized user experience and increased user satisfaction.

## **Reflections on the formation of the collection of the Academy of law of San Francisco: 19th century to our days**

***Maria Lucia Beffa, Maira Cunha de Souza Maria, Sergio Carlos  
Novaes, Sílvia Mara de Andrade Jastwebski***

Faculty of Law of the University of São Paulo, Brazil

**Abstract:** The paper presents some reflections on the history of the formation of the academic collection of legal courses of Brazil created in the 19th century, specifically from the Faculty of Law of The University of São Paulo. The first public library in São Paulo, founded in 1825, has exercised a strong influence for the convent of the Franciscan friars receive law school created by Imperial Decree, due to its bibliographic Fund of 5,000 thousand books, mainly of ecclesiastical nature, and considerable cultural standards of Brazil at the time. Currently appears as an important academic law library of Latin America and, throughout its history has been a depository institution moral, i.e. receives donations from various localities of the country, sent spontaneously by the authors to have their work in the collection of the first and one of the most traditional law courses of Brazil. This collection is estimated to be approximately 400 thousand items with donations of Brazilian personalities throughout its history. Another point studied refers to establishment of criteria – editorial, renowned authors, relevance on the themes addressed, etc. – on grounds of editorial boom occurred in the Decade of 1990, concomitant with the increase in law schools in the country. Calls to the reflection of someone who works in the legal harvest to make sure relevant items at the time of selection so as not to incur in error to evaluate with modernity, ideological bias, personal study or interest based only on the date of publication of the work. The humanities, unlike other areas, have their slowest obsolescence or non-existent, being in grave error to the Right judge solely by publication date, which makes it urgent to professional librarians to master basic concepts in the area of performance to which the libraries are repositories of bibliographical material.

**Keywords:** College of Law Library (São Paulo, Brazil), History of collection, Acquisition, Selection

# **The relationship between job stress and quality of working life among academic librarians in Sistan and Baluchestan Province**

*Fahimeh Babalhavaeji, Zahra Abazari, Samira Ziyadeh*

Islamic Azad University of Tehran North Branch, Iran

## **Abstract:**

**Purpose:** The present study has been accomplished to assess the relationship between job stress and quality of working life among academic librarians in Sistan and Baluchestan Province.

**Methods/Approaches to the Research:** The method of this research is analytical-survey using two standardized questionnaires of "Quality of work life" and "Osipow's job stress" to analyze the data. The questionnaires have content validity. The reliability of the questionnaire was calculated by Cronbach's alpha measuring tool. The reliability of the first and the second questionnaires was calculated 91/3% and 82/4% respectively. Total population was 139 people and due to the limited population, sampling was not done. From the entire population, 112 people (80/5 percent) responded to the questionnaires.

**Findings:** The results of the study showed that the majority of the population was women, most of them were married and in the age group 26 to 35 years, most of them were more than 5 years of work experience and were graduated in majors other than librarian. The average quality of working life of the population was found 104/28 which was the most important factor influencing the health and safety of the work environment. There was a meaningful mean difference between aspects of the quality of working life at the level of 0/01. The sample mean stress was achieved 142/75 that the most effective factor was related to "the role of workload" aspect. Moreover, there was not a meaningful relationship between the quality of work life and job stress and academic characteristics.

**Results:** The quality of working life of the population was evaluated average and their job stress was assessed normal in the evaluations. There was no significant relationship between job stress and the quality of working life but their reverse negative on each other was observed in the results. The mean of working life quality of singles, those who were educated in library science at B. A.

**Keywords:** Job stress, Quality of working, Academic librarians, Sistan & Baluchestan University

# **The relationship between career trajectory and perceptions of skill development relevant to the academic library directorship**

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**Abstract:** Leadership in academic libraries has emerged as a pressing topic in an environment currently dominated by budget difficulties, rapid change, and demands for increased demonstration of value, assessment, and accountability for performance. The

concept of grooming leadership and succession planning is not new to the library profession (Bridgland, 1999; Curran, 2003; Metz, 1978). Various institutes, associations, and programs focused on developing librarian leadership exist, but many of these programs depend heavily on self-selection or nomination by colleagues. There is little in the way of formal path-setting in the profession that would guide a librarian interested in becoming a director. The purpose of this study is two-fold: (1) to determine if academic library directors share particular characteristics in their career trajectory, and (2) to determine whether certain skills relevant to academic library directorship are more likely to be acquired in one professional capacity than another. The study will identify career trajectories of current academic library directors, provide rising professionals some guidance in making career choices, and identify which positions may best prepare future directors.

**Keywords:** Academic libraries, Leadership, Career trajectory, Professional development

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## The Relationship between Organizational Commitment of staff and Organizational Excellence (according to the EFQM model) in the university libraries

*Zahra Maleki Ziabari<sup>1</sup> and Ahmad Kazemlou Sheikhi<sup>2</sup>*

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**Abstract:** The main purpose of this research is the evaluation and determination of the relationship between the Organizational Excellence and Organizational Commitment in staff of the university libraries in Guilan Province. The research method is explanatory – surveying and a kind of solidarity search. The tools of gathering the information are the standard questionnaire of the Organizational Excellence in EFQM and the Organizational Commitment questionnaire of Meyer and Allen. Cronbach method was used to measure the questionnaire's durability and the Cronbach's alpha index for the Organizational Excellence and Organizational Commitment is 0.977 and 0.816, respectively. The statistical community includes all the staff of university libraries in Guilan and there were about 125 people. In this search, the statistical sample is as same as the community and all of them were studied by a census. When the questionnaires were distributed among the members, 118 of them were backed and analyzed for the data analyzing, the explanatory and perceptive method were used. The result of this research showed a positive and meaningful relationship between the Organizational Excellence and Organizational Commitment. And also a positive and meaningful relationship obtains between the Organizational Excellence, Affective commitment and Normative

Commitment but there wasn't a meaningful relationship between the Organizational Excellence and the Continuance Commitment. The finding demonstrated the positive and meaningful relationship between the Organizational Commitment, powerful area and the result of the Organizational Excellence in EFQM model. To investigate the advantage of Organizational Excellence, the findings in university libraries is based on EFQM model and its 401.38 out of 1000. This advantage is lower than the expected average. Also the total point of Organizational Commitment related to the staff of these libraries is equal to 3.24. According to this research's findings, we can say having some good staff is one of the main and effective factors of the organizational success and excellence and the library managers should care about this point and organize some targeted plans and some suitable techniques to promote the Organizational Commitment of the staff. After that the Organizational Excellence could be under their control and also the managers have to use some of the patterns of Organizational Commitment to recognize their weaknesses and some parts of their job which need some improvement, try to solve them and move intellectually to increased success, superiority and excellence of the organization.

**Keywords:** Organizational Excellence, The EFQM model, Organizational Commitment, Affective Commitment, Continuance Commitment, Normative Commitment, University libraries, Guilan Province

## **The relevance of publications on the subject Innovation in Portuguese language over the last 30 years: a bibliometric contribution**

*Janete S. Bach Estevão and Walter Tadahiro Shima*

Federal University of Paraná – UFPR, Brazil

**Abstract:** This study presents the results of the bibliometric research on the subject 'Innovations and (neo) Schumpeterian approaches'. Specifically, the study intends to show the relevance of the publications in Portuguese over the last thirty years. On a different study into the same subject and period of coverage (FAGERBERG; FOSAASA; SAPPRASERTA, 2012), it could be seen, as a result of repeated research, that there were not many publications in English and there was a lack of methodology to indicate better criteria for searching, content analysis, and research patterns when distinct databases were used. Although the subject 'Innovations and Schumpeterian approaches' is fairly addressed by graduate programs in Economics, Business, Sociology and Development, in Brazil, the volume of publications on this subject in Portuguese is surprisingly limited, basically irrelevant in comparison to the volume of publications in English. The bibliometric survey shows a scientific production well below expectations, given the professors' vast background in the referred program. It is important to emphasize here that many Brazilian professors are qualified in the main centres that deal with innovation in Europe and the United States. The resources, which come from the Information Science, for bibliometric research are widely used in various fields of knowledge with the aim of measuring the results of academic/scientific production in each area. Although the literature of Information Science includes the production of bibliometric research, the details that concern the implementation of such research, the researchers' decisions regarding the use of searching strategies and the use of terms adopted as well as the possibilities of advanced features provided by different databases have still to be defined in a systematic way. Therefore, the aim of this paper is to present a comparative research,



in English, on the evolution of the theoretical neo-Schumpeterian conception throughout the last thirty years (FAGERBERG; FOSAASA; SAPPRASERTA, 2012), reproduced with the same terms in Portuguese in order to indicate a methodological way for the bibliometric research results.

**Keywords:** Innovation, Bibliometrics, Database research, Bibliometric research–methodology

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## **Remote Access Reference Evaluation (RARE); closing the gap on long distance accessibility** *Grant Gerlich*

Archivist/Director, MercyHeritageCenter, Belmont, USA

**Abstract:** Advances in technology and the need to achieve economies of scale have made the concept of centralized repositories more attractive. However when the majority of the reference inquiries are remote, the lines between reference and research are skewed. In an attempt to quantify time and effort in each reference transaction, RARE (Remote Access Reference Evaluation) records a variety of data to better utilize resources and emphasize the value of service the Mercy Heritage Center (MHC) provides to its core patrons. This presentation will illustrate how RARE is used to substantiate the impact remote reference has on staff time and to justify the need for additional resources.

**Keywords:** Archives, Reference, Research, Quantify, Remote access, Accessibility, Budget, Resource allocation

## **Research collaboration between StockholmUniversity and other Swedish academic units: a bibliometric study to support decisions on library collaboration** *Per Ahlgren, Johan Hinders, Camilla Lindelöw, Sara Parmhed and Per Swedberg*

University Library, Stockholm University, Sweden

**Abstract:** Academic libraries collaborate in several ways. For instance, collaboration can concern standards for indexing and statistics, technical solutions or collection

development. A question that a given academic library might ask is with which other academic libraries the library should principally collaborate. In this study, we show how bibliometric methods can be used to generate information that can support decision making with regard to the question at stake. We evaluate the amount of research collaboration between StockholmUniversity and other Swedish academic institutions across five publishing years, and for the whole considered time period, where research collaboration is operationalized as co-publishing. A dataset of publications obtained from Web of Science, where each publication has at least one StockholmUniversity address, is used in the study. Co-publishing rates, non-fractionalized and fractionalized, across the publishing years and for the whole for period, for StockholmUniversity and other Swedish academic institutions, are reported. Further, parts of the outcome of the study are visualized in terms of co-publishing networks.

**Keywords:** Bibliometrics, Co-publishing, Decision making, Fractionalization, Research collaboration, StockholmUniversity

## **Research journal of physical education and sports sciences, the SHIELD: a bibliometric study**

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<sup>2</sup>Professor in Library and Information Science & Pro-Vice Chancellor, University of Sindh Jamshoro, Pakistan

**Abstract:** Bibliometrics is a quantitative and statistical research study of various aspects of research journals or literature on a topic. The bibliometric study of a research publication is used to cover the pattern of publications, citation analysis, authorship and geographical distribution. The term Bibliometrics is derived from two words “biblion” (Greek): book and “metron” (Greek): “measure” and was used for the first time by Pritchard in 1969. Bibliometric study of a scholarly journal acts like a portrait of that journal. It shows the standard, productivity and maturity of the research publications. It is also used as an instrument for the collection development process by giving valued and much more needed information to the library personnel to select or discard a document from the library stock. There are two types of bibliometrics: descriptive and evaluative. Descriptive bibliometrics is further divided into geographic, time span and subjects’ bibliometrics. Evaluative bibliometrics is referred to reference and citation. Librametrics and scientrometrics are the synonyms of bibliometrics.

The Research Journal of Physical Education and Sports Sciences: The SHIELD is a Higher Education Commission (HEC) recognized research journal. The frequency of publication of The Shield is annual. It is published by the Centre for Health and Physical Education, Faculty of Natural Sciences, University of Sindh Jamshoro, Pakistan. The main goal behind the publication of this journal is to provide a platform to the scholars of physical education and sports sciences and other related fields to express and share their views with the world. The Shield has some eminent scholars on the Editorial Board from within the country and outside the country.

## **Research papers of Acharya Prafulla Chandra Roy: a bibliometric study**

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<sup>2</sup>Professor, Department of Library and Information Science, University of Calcutta, Kolkata, India

**Abstract:** This study presents bibliometric analysis of the research papers of Acharya Prafulla Chandra Roy. He is one of the scientists who popularized science in India and truly known as the 'Father of Indian Chemistry'. During the period of 1888 to 1936, in a span of 49 years he contributed 158 research papers in several reputed national and international journals. The analysis of his contributions includes year and periodical wise distribution of items; their language wise distribution; and single and multiple authorship. Year wise distribution of pages authored by Acharya Prafulla Chandra Roy has also been presented. It also includes his journal preference based on periodical wise distribution of articles. Subject keywords have also been enlisted.

## **Research partners: the establishing of a collaborative partnership between the Research Office and University Libraries' in support of research at the University of Cape Town, South Africa**

*Cyrill Walters<sup>1</sup> and Dianne Steele<sup>2</sup>*

<sup>1</sup>Manager: Commerce Information Services, University of Cape Town Libraries, South Africa

<sup>2</sup>Librarian: Commerce Information Services, University of Cape Town Libraries, South Africa

**Abstract:** Global economic stagnation has prompted higher education institutions across the world to persistently seek ways to advance their research performance to improve their competitive position. As many higher education institutions review their strategic goals, it is crucial that stakeholders across these institutions align themselves with their institution's plans, and find opportunities for contribution. Academic liaison librarians have recognised the need to extend beyond the traditional partnerships in support of teaching and learning with academic departments. Their information management instincts stand them in good stead to contribute and collaborate with university stakeholders in the processes of securing funds, management of research data, and bibliometric measures in research assessment.

Since 2007, the University of Cape Town (UCT) has been rated as one of the top 200 universities of the world (Times Higher Education Supplement World University Rankings). The University, recognized the need for multi-faceted collaboration (UCT, 2013), as it has become imperative to create opportunities for research partnerships benefit from available funding.

The Research Office regards research support as one of crucial components amongst its activities at UCT. Indeed, the mission of the office emphasises the research role to: "building new research capacity as well as sustaining existing excellence, whilst critically reflecting on, and evolving, our own systems and procedures" (UCT, 2013).

UCT libraries underwent a rigorous strategic planning process in 2012 and recognised the need to align its objectives closely to that of the University as a whole. This planning process provided the impetus for librarians to build and maintain collaborative

partnerships with key stakeholders across campus in support of research as well as develop staff skills to support the research needs of their academic communities.

In line with the strategies and endeavours of the University and the Research Office, UCT Libraries engaged with them, as well as other key stakeholders across the University in support of research outputs.

This paper aims to:

1. Articulate the collaborative partnership of UCT Libraries with the Research Office as well as the role of the research librarian in offering support to research.
2. Elaborate on successful projects embarked on by the Libraries and Research Office that have informed University management of key research collaborations that need to be explored.
3. Identify the key functionalities in the *SciVal Spotlight* Service to evaluate, establish and execute more informed research strategies for Universities.
4. Discuss the collaborative efforts of UCT Libraries and the Research Office that facilitate access to funding opportunities like those available on platforms such as *Research Professional Africa*.
5. Recommend key marketing strategies to create awareness on campus regarding the funding opportunities and identifying potential research collaborations to researchers faculty.

**Keywords:** Research support, Collaboration, Academic libraries, Research office, Cooperation

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## A research upon the mobbing perception at work amongst Turkish Librarians

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**Abstract:**In literary terms, mobbing including psychological violence, pressure, ganging up on, abuse, and harassment is defined as psychological terror in which a person or people generally behave others in a hostile and immoral way, and which they systematically bring. People who undergo mobbing get obliged to work in emotionally unfortunate workplaces. Mobbing has an effect on the health of its victims, and subsequently decreases their concentration. Although it had physically and psychologically impaired many people in work life for years, the term was defined in the

late 1980s, and there have been many studies since then. Especially in Turkey, it is estimated that there are many people who feel this syndrome, but adequate awareness has not been promoted yet. In certain sectors (education, health, service, security etc.) of workplaces in Turkey, there have conducted many studies upon how mobbing is perceived; however, there is no such research produced including libraries which stands in the service sector.

This study aims at revealing the perceptions and opinions of working librarians towards mobbing in different types of library (university, public, private research library etc.) in Turkey. For the purpose of contributing to such studies, and to raising the awareness of the concept amongst librarians, the level of librarians' perception of terrorization is worked to identify by utilizing LIPT scale, and the variation of these perceptions against demographic variables is studied. In the analyses, T test and A-One-Way Analysis of Variance (ANOVA) are applied via SPSS pocket program.

**Keywords:** Mobbing, Mobbing perception, Psychological abuse at work, Psychological violence at work, Human resource management, Librarians, Prevention librarians

## **Revealing the “essence” of things: using phenomenology in LIS research**

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**Abstract:** Phenomenology is a qualitative research methodology. It is inspired by the branch of philosophy which concerns the phenomenon of human consciousness and the reflective analyses of life-world experiences (Von Eckartzberg, 1986; Moustakas, 1994). It is a recommended methodology when the study goals are to understand the meanings of human experiences (Creswell, 1998) or to explore concepts from new and fresh perspectives (Sanders, 1982; Cohen, Kahn, & Steeves, 2002). The methodology allows the researchers to reveal the “essence of things” and provides insights into social phenomenon.

Phenomenology as an approach of inquiry has been used in psychology, education, nursing, and some LIS research. However, existing methodology guidance is often conceptual and abstract, focusing on the philosophical underpinning of the methodology. Few procedural instructions were given such as how to code and interpret narrative data and how to generate analytic research findings. Consequently, novice researchers suffering from the lack of specific step-by-step guidance need to draw from other qualitative methodology resources to justify their research actions and decision-making along the process. More discussions on the use of the methodology in different study topics and in different research contexts will greatly benefit the qualitative research community.

In this paper, the author will report on his experiences with the methodology in two different research projects. The first was a study of the meanings of “government publication” as perceived by the American government agency Web managers and digital depository librarians. In this age of Web-based government information, digital preservation of the information released and disseminated via the Web for historical record and permanent public access has become a challenge for memory organizations such as libraries and archives. Previous studies showed that, in the United States, the state depository libraries continued to look for Web-based information that looks like

“publications” for inclusion in the digital depositories. That means the concept of government publications greatly influenced what was captured for long term preservation and what was likely to be lost in the constantly forming historical record within the highly publication-centered depository model. Consequently, the conceptualization of government publications fundamentally influenced the development of the novel digital depositories. In the study, the author followed the guidance of phenomenology, combined with the grounded theory (Charmez, 2006; Strauss & Corbin, 1998) and comparative qualitative analysis techniques (Miles & Huberman, 1994), to compare the perceptions of stakeholders influencing the collection development of digital depositories. This paper will explain the rationales behind the research actions and the data coding procedures. The second study was an investigation on why heterosexual women read Boys’ Love (BL) stories and what pleasures they got from BL reading. BL is love stories between two males created predominantly by straight women for straight women. It is a recent popular genre of romance fiction, manga, animation, and so on. Why BL attracts such a large female fandom is a curious phenomenon awaiting explanation. The author conducted in-depth interviews with 26 female BL readers in Taiwan to understand why they enjoyed BL. Drawing from phenomenology the author interpreted the interview transcriptions from different angles and derived a typology of reading pleasures experienced by the interviewees. There were the pleasures of transgression and sociality. Various facets of transgressional pleasures were further uncovered in the analysis. For the second study, this paper will focus on explaining how the author coded the data and how he interpreted the narratives.

## **A review of cooperative digital library projects contributing to the global information network and enabling local resources to be accessed through the Web**

***Vicki L. Gregory and Anna H. Perrault***  
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**Abstract:** Computer-enabled library networks first began as local projects, such as city or state cataloguing cooperatives. Gradually these networks began to merge, creating larger pools of resources. OCLC is an example, having begun as a statewide network in Ohio and subsuming other networks in the United States such as WLN and RLG, then moving increasingly international with OCLC locations in Europe and in Asia, presently providing both OCLC local and global management modules. This phenomenon is continuing today in the age of globalization. Digital libraries started out as local projects to digitize and make accessible all manner of local materials. The pools of resources are continuing to get larger in geographic and materials scope with such digital projects as Europeana and the European Digital Library; the Digital Public library in the United States, the Caribbean Digital Library and many others. With the advent of the World Wide Web, globalization has become a revolution in business, culture, and society that has affected every aspect of life. A direct consequence of this revolution in libraries is bringing many more rare and unique materials to scholars without the need for travel to the resources as in the fairly recent past. As opposed to the beginning of the use of computer technology in libraries, now a large organization is not necessary for the

sharing of local information as digital library projects are often groups of libraries, and not necessarily large libraries, to make local or unique materials available globally. Cooperation now includes other cultural heritage institutions such as museums and archives. This research paper will look at several examples of this type of digital library cooperation to increase the materials that can be accessed through the Web to bring ideas to the table that others may use in their own situations.

## **The role and importance of information usage in benchmarking process**

*Berat Bir*

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**Abstract:** Benchmarking which is one of the important modern management approaches, is to aim to develop organization and also provide permanent development namely Kaizen. This approach or model was affected by total quality management model as well. The model itself contains many processes and of course steps. In other words, in order to apply this model effectively, it's necessary to move with a systematic outlook. However it needs to be applied information based which means in the process of benchmarking, collection, share, usage and leverage of information is important. In this study, the role and importance of usage of information in the process of benchmarking will be handled exhaustively.

## **The role of EU-sponsored Hungarian library projects in the development of digital competencies**

*Maria Borbely and Erzsebet Dani*

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**Abstract:** The role of Hungarian libraries in the development of digital information literacy is unambiguous owing to their all-encompassing social presence, which lends them a strong social imbeddedness. Since 2008 Hungarian libraries have been part of several important EU sponsored projects. These made development of computer infrastructure possible and created the opportunity for these facilities to put in applications whose benefit could unmistakably impact the level and the degree of digital skills. Information literacy is not limited to the availability of library resources, because the way different generations avail themselves of those resources bespeaks of a digital divide (among baby-boomers, generations x, y, and z in different combinations and different senses).

The present study takes a comparative look at where we are regarding digital competences in Hungary and the EU27, based on EUROSTAT reports and data. Hungary's data follow the EU27 pattern in general, but marked differences can be observed in certain areas. Through an analysis of closed and on-going library projects,

the paper is an attempt to establish the extent to which those projects foster the development of competencies with special regard to Hungarian specifics.

**Keywords:** Computer skills, Internet skills, Digital competences, Hungary, EU27, Tendering operation, Libraries

## **The role of social networks sites in participative management**

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**Abstract:** The internet is a non-focused network of computers that can affect all aspects of life. In fact it has so penetrated in people's lives that for many of them it is difficult to live without it. Social networks are among the most user-admired sites that have high growth statistics. These sites by having specific features such as deindustrializing the web, producing information by a large number of ordinary users, as well as compier users, verses producing information by a small group of experts, have made an evolution in many specialized fields. The aim of this study is to assess the role of these networks in management improvement in organization as well as libraries. Using the internet in middle-level management, receiving feedback for control and planning, making a learning organization, absorbing financial sources of governmental and private organizations, repacking of information by assessing and participating in discussion of organization and finally its conjunction with answering users are the issues that will be discussed. We used library survey for Method.

## **The role of Web 2.0 in Information Literacy**

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**Abstract:** Today, one of the features of an advanced country is equipping its citizens with skills that enable them to live in the world of knowledge. Making tools of technology with new capabilities has an important role as the base of the base of these skills. "information literacy" as an essential provision for entering the age of information, is defined as a combination of abilities that help people to understand when they need information and the way of using, storing, evaluating and effective use of it. In order to develop this kind of literacy in the society, we need "learning of learning" skills that is now a web and internet environment. In this essay, we take a look at web generation and we discuss about the role of web 2.0 as one of these tools that by its functional criteria like mutual interaction with addressees or deterring the commercial aspect of web, provide a way for the approach of finding information and useful use of it.



Finally, we come to this conclusion that teaching policies should be based on teaching all people the way of using internet facilities, especially web 2.0 and that learning process of society should be changed so that all people, become able to use technological facilities, information and new findings. We used library survey Method.

**Keywords:** Web 2.0, Information Literacy

## **Scholarly collaboration among ASEAN countries: A bilateral bibliometric study**

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**Abstract:** Academic and research collaboration among ten members of the Association of Southeast Asian Nations (ASEAN) has been promoted through numerous strategic measures for decades (e.g., ASEAN, 1967; 2009). This descriptive study uses co-authorship in research publications in as an indicator of an outcome of such efforts. Using databases available in ISI Web of Knowledge, the numbers of publications collaboratively authored by researchers between two ASEAN countries during 1997 and 2011 are compared in terms of correlation coefficients and observed/expected ratio and illustrated in graphical representation using multidimensional scaling technique (Luukkonen et al., 1992; Merlin & Persson, 1996). The results of this study preliminarily depict the progress and the dynamics of research collaboration among researchers in this region.

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## **Science video journals to increase productivity in research and education**

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**Abstract:** Biological and medical sciences chronically suffer from the low productivity and reproducibility of experimental studies. This is due in part because the traditional text-based format of science journals cannot provide an adequate description of complex research procedures. This creates a critical bottleneck problem of knowledge transfer for research and education. Addressing this challenge, a new generation of science journals employs video online to provide a systematic visualized publication of experimental studies. This presentation will provide an overview of the growing field of video publication and discuss its technical challenges, implications for scholarly communication and acceptance in the academic and library community.

**Keywords:** Video publication, Video journal, Reproducibility

## **The scientific productions of General Internal Medicine Domain in Islamic Countries of Middle East Based on Web of Science: a scientometric study**

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**Abstract:** The position of General Internal Medicine in the Islamic countries in the Middle East has been investigated in the present study. The scientific productions of the countries in the area on Web of science database during 1990-2011 constitute were examined. The result of the survey showed that the share of these countries in world scientific productions is very low. Turkey, Saudi Arabia and Iran are the first to third ones in this domain in order. In view of annual growth rate, Kuwait having high growth rate, is the first one. Libya and Syria are the next ones. The scientific poverty line of Islamic countries in the area was surveyed. The result showed that in view of the scientific poverty line, the highest is Kuwait with the population of 0.04 percent of the world. Next to it, Saudi Arabia and Bahrain are the second and third ones. Finally, the results of this research showed that the share of Islamic countries in the Middle East in scientific production of this medicine domain is very low. It needs to be paid more attention by the countries in the area.

**Keywords:** Web of Science database, Scientometrics, General Internal Medicine, Muslim countries, Middle East countries, Scientific production

## Secondary data analysis: a method whose time has come

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**Abstract:** This paper considers the use of secondary data analysis method in library and information science research. In a time where a vast amount of data is being collected and archived on a daily basis by researchers all over the world, the practicality of utilizing existing data for research is becoming more prevalent. This paper asserts that secondary data analysis is a viable method to utilize in the process of inquiry. There are many interpretations and definitions as to what constitutes secondary analysis. The most-widely accepted definition is presented by Hakim (1982) as “any further analysis of an existing dataset which presents interpretations, conclusions or knowledge additional to, or different from, those presented in the first report on the inquiry as a whole and its main results” (p. 1). Most research begins with an investigation to learn what is already known and what remains to be learned about a topic through reviewing secondary sources and investigations others have previously conducted in the specified area of interest. Secondary analysis takes this one step further, including a review the data previously collected. While secondary analysis is flexible and can be utilized in several ways, it is also an empirical exercise and a systematic method with procedural and evaluative steps to be followed, just as there are in collecting and evaluating primary data. The concept of secondary data analysis first emerged with Glaser’s discussion of re-analyzing data “which were originally collected for other purposes” (1963, p. 11), yet there remains a dearth of research and literature that examines this method. This paper reviews the literature addressing this method; examines the benefits, disadvantages, and challenges; presents an effective application example; and seeks to provide a standard process when utilizing secondary data analysis in research.

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## See results: tips & tools for visualizing library data

*Rachel Besara*

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**Abstract:** We live in a data rich environment where our challenge has moved from gathering data to showing stakeholders what data means. This presentation will cover best practices in data visualization and provide examples of how some of them have been applied in libraries. In addition, the adaptation of free, business-oriented interactive data business analytic software will be discussed. The resulting interactive charts and graphs allow the presenter to “choose their own path” when telling the data’s story. Having effective, interactive access to library statistics in a timely manner can make a difference

in understanding data and using it in decision-making. See results when you present your library data in an effective, visual way.

## **Setup a collaborative network with Resource Centers of State Election Offices: an initiative**

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<sup>2</sup>Librarian, Compact Society for Social Welfare, India

**Abstract:** The Information Technology revolution that is unraveling in the world since the last few years has changed the way in which information is created, processed and utilized. This has certainly increased the efficiency and effectiveness of our information system. Application of computers are not limited to library automation, Information retrieval and information management system, it also offer a new dimension to cooperation among other libraries and resource centers. Cooperation through networking is one of the most effective ways of sharing the resources to meet the information needs of the users. Network among libraries serve co-operations by providing for the sharing & exchange of information resources. The growth of networks in India may be traced to the efforts made during the last three decades. There are so many networks are exist in India at Local level, Metro level, Regional level and National level.

The Library & Resource Centre (LRC) of Election Commission of India is a unique information resource centre, which provides an access to documentation on all aspects of the subjects of democracy, election and electoral related subjects. It conceived as major repository of reference material, primary and secondary, relating to various dimensions of election. This Resource Centre came into existence with the inception of Election Commission in 1950 devoted to dissemination and documentation services through innumerable activities such as newspaper clipping, indexing and development of database, library automation, providing access to national/international information source and consultancy services etc. The core activity of the LRC is to collect/store and disseminate electoral information, which are needed to the Commission for the benefit of different segments of the society. LRC has a rich collection of latest materials like books, Census, monographs, government reports, seminar and conference proceedings, international publications on democracy and allied disciplines.

The Republic of India was constituted in 1947 as a Union of States. At present, India has 28 States and 7 Union Territories (UTs). At the State and UTs level, the election work is supervised by the Chief Electoral Officer (CEOs) under the direction and control of the Election Commission of India. Each CEOs Office has a complete infrastructure including Resource Centre. The LRC has initiated to set-up collaboration and Network with CEOs Resource Centers of Each state and UTs for the purpose of sharing and dissemination of information to the organizations and individuals involved in Democracy and Election management area in the country.

This paper discuss the strategy of the project, objectives, activities and action taken by each CEOs offices for developing network with each CEOs offices. Also describes the challenges and further plan to make this project at International level.

## **Sharing electronic resources among three institutions**

*Ellen Nordre Sayed, Alice Burnett*

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**Abstract:** This paper discusses the co-operation between CornellUniversity in Ithaca, New York, WeillCornellMedicalCollege in New York, and WeillCornellMedicalCollege in Qatar. The University in Ithaca was founded 147 years ago in 1865, the College in New York began in 1898, 114 years ago, and the College in Qatar was established in January 2001 in a partnership between CornellUniversity and Qatar Foundation. Co-operation and communication between the three partners is essential to make the partnership work successfully. The actions, procedures, and problems encountered along the way are presented, along with metrics for the collection in Doha.

**Keywords:** Electronic resources, Consortia, Collection development, Medical libraries

## **Skills for health librarians in Brazil: perspectives on health quality information**

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<sup>2</sup>UnB/Faculdade de Ciência da Informação, Brazil

**Abstract:**The introduction of health libraries networks on Internet has expanded the management model of Virtual Health Library in Brazil, requiring professional skills related to quality of health information. Through the method of Managing of Services: 'System information on service quality', this research applied survey containing 22 questions on an assessment of core variables that was applied in the major health institutions in Brazil to discuss about librarians' skills and set of information quality criteria. This expansion is due to advent of Open Access and Information Networking Systems and brought challenge for managers of health libraries about quality management as a way to increase quality of health information among health institutions in the country.

**Keywords:** Health librarians Skills, Health information management, Health information quality, Health information systems, Health library in Brazil

## **SME's and collaborative learning: some challenges and possibilities**

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**Abstract:** This paper explores patterns in e-learning particularly with respect to an individual's ability to develop their range of training and learning options incorporating Web. 2.0 technologies, collaborative learning communities. With the Irish economy currently attempting to move away from a debt-based model and towards a profitable basis once more, there is much discussion in Ireland of SMEs and their important role in generating growth, sustainability, and profitability. Much of this discussion is aspirational, however and little cognizance is given to how e-learning, whether formal or

informal, currently and actually occurs within the SME sector and how a more rounded or “holistic” approach might be taken to such learning, as supported by new technologies and resources but also to allow for better learning outcomes as based on SME workers’ previous experiences of informal learning but also in relation to their immediate needs within a very challenging and competitive environment. The majority of training in SMEs is informal therefore it is important for both individuals and SMEs to capture the information obtained by means of informal learning. It is widely acknowledged that communities that generate learning as a side-benefit do not often originate with e-learning as their initial priority. In addition this paper also examines how Web 2.0 technologies can be used for informal learning in SME.

## **The social function of the public library in the world of social networks and welfare state crisis**

*Luísa Alvim, José António Calixto*

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**Abstract:** Today, welfare state model is under discussion. In its genesis, this model had the intention of creating a sense of belonging and a cohesive community, concerned with the construction of a just society through the redistribution of wealth and attention to the most vulnerable population. Europe has a history of developing economic policies that led to the building, after the 2nd world war, of a society with constitutional recognition of social rights, highlighting the notion of citizenship. The current economic crisis installed the debate on the performance of state organizations and their social role.

The public library, while state organization has a social function. This paper aims to review the theoretical perspectives on the social function of the public library and identify the connections between the presence of public libraries in social networks and the relation to the evolution of their social responsibility in the scenario of the current discussion of the model of the welfare state and the widespread economic crisis. This work is part of a broader research project in the Web 2.0 impact on the social role of Portuguese public libraries observed in Facebook social network.

**Keywords:** Social role of the public library, social networks, welfare state, Economic crisis

## **The social nature of the World Digital Library: digital heritage for social memory representation**

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**Abstract:** This article treats about the social nature of the World Digital Library (WDL). It aims to discuss WDL as a collective space capable to reveal social memory aspects. It argues how WDL comprises cultural heritage able to represent social memory phenomena? How WDL’s collections can be perceived as landmarks of social memory and identity? This qualitative and qualitative research is focuses on: 1) Literature Review on social memory, identity and digital heritage; 2) Experiment performed with

undergraduates in the Laboratory of Bibliography, conducted in 2012 by the Collage Method. It resulted in six categories related to memory and heritage. Thus, social identity represents the duality between identities with the otherness, as expression of linkage of his memory to the other. The WDL's digital heritage represents dynamics of memory and identity.

**Keywords:** WDL, Cultural heritage, Digital heritage, Social memory, Identity

## **Student expectations from a cross-cultural virtual collaboration: a qualitative analysis**

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**Abstract:** Peer assessment helps create a learning environment whereby students learn not only from the instructor, but also from one another and one other's work. The usage of cross-culture collaborations and peer review teaching methodologies in Library and Information Science (LIS) education have shown to benefit student learning. Student benefits include empowerment and motivation to produce quality work, promotion of critical thinking and cognitive development, nurturing a collaborative and cooperative community of responsible and self-confident learners who are better prepared for the working world. However, LIS students are often made to collaborate with their peers within the same course and from the same discipline. In addition, while social media has been used in education in recent years, the use of social media for cross-culture peer review is not normally seen. In this study, collaboration was carried between 58 LIS students taking the 'Technology for Information Professionals' course from Simmons College, Boston and between 250 non-LIS students taking the 'Effective Internet Research' course from Temasek Polytechnic, Singapore. While the Simmons students had to develop their personal web portfolio/website as part of the course, the Temasek students had to develop a Facebook page on a research topic assigned to them. Using Facebook as a medium for communication, the two sets of students provided peer reviews to each other on their respective assignments. Considering that the students were coming from different countries, different types of schools, different cultures and different age-groups, each student was asked to answer a question before embarking on the collaborative peer-review exercise. The question was, "[Before starting to converse on Facebook], what are your expectations from the virtual collaboration?" Expectations form a key basis for the success of any endeavour. In this paper, the 308 open-ended responses from both sets of students will be analyzed and the findings reported. The findings will throw light on whether the students expected to enjoy and looked forward to the activity, whether they were enthusiastic and motivated to do the collaboration, or if they had concerns on use of Facebook, reliability, knowledge-level and age-groups of peer(s), concerns due to time constraints, etc. The study has unique implications for education programs in Library and Information Science and for academic and other libraries, by providing a model for cross-country virtual collaboration. Library and Information Science students will see the benefits of knowledge sharing, effectively replacing competition with collaboration. Upon graduating, students carry this sense of collaboration (not just with service providers, but with library users as well) into the libraries, archives, museums and other information centres that they work in, helping create healthy work environments. Future work will report the analyses of others sets of

data, including 1) the Facebook interaction; 2) student reflections on the collaborative peer review exercise; and 3) the quantitative data provided through a survey questionnaire, as well as map the entire process of collaboration for action research.

**Keywords:** Cross-cultural collaboration, Peer review, Qualitative analysis

## **Study and analysis of province Payamenoor Universities websites using W3C open source softwares**

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Iran

**Abstract:** Nowadays, the web and internet as the communication and educational tools are of vital importance, especially in academic environments. Payame Noor University (PNU) in Iran is a state distance education university with 32 provincial centers, 500 local study centers, 3,500 academic members and 1,000,000 students and campuses all around the country. The objective of current research is analyzing of provincial PNU websites. A webometrics approach was used for this study. Webometrics method assesses various aspects of the web likes, web pages, words of web pages, hyperlinks and etc. The population of study was all of the provincial PNU websites. Required Data was gathered by using the W3C online soft ware and analyzed by Excel and SPSS. Results showed the rate of broken links in the websites is in average and suitable ratio. The number of HTML errors in base of webpage number was very high. The waiting time to loading the websites in various internet speeds were very long. The correlation coefficient between number of web pages and broken links, and also, between the web page size and loading time was 0.73 and 0.69, respectively. It is recommended that using of the various soft wares to defect the resolution and increasing websites quantity and quality level by designers, can improve communication process between system and users. Also, it is recommended that website designers to give more attention to the design standards and criteria.

**Keywords:** Websites, PayameNoorUniversity, Webometrics, W3C consortium

## **A study of job satisfaction among Cape Town's public library staff**

*Genevieve Hart*

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**Abstract:** The proposed paper reports on a survey of job satisfaction in 2012 among public library staff in the City of Cape Town, who have experienced years of turbulent change. After years of neglect, the public library sector in South Africa is receiving generous injections of funds from central government to support its role in socio-economic development and education. Reflecting the transformation of its parent city after the demise of apartheid, Cape Town's library service has undergone huge shifts



since the mid 1990s: merging three separate library systems, each of which had its own governance, staff, and policies; reconfiguring its libraries into six districts that are designed to cut across the racially-based barriers of apartheid town-planning; and building new libraries in under-served townships. These reconfigurations have been accompanied by changes in staff and user profiles across the city. For example, absences of school libraries in the so-called townships.

Schools and the new resource-thirsty curriculum have meant significant increases in the use of public libraries by school pupils. Most come to the library ill-prepared, with no library experience or information skills. Cape Town's so-called black townships have disproportionate rates of poverty, unemployment, violence, and crime. Librarians in these areas of the city face specific challenges arising from their socio-economic context.

These kinds of shifts and challenges must lead to questions around their impact on the well-being of public library staff. The fundamental question of the research project, described in this paper, was: How satisfied are Cape Town's public library staff? Related questions were: What makes them satisfied or dissatisfied? Are there differences within the districts? Are there differences among levels of staff? 120 interviews, based on a fairly structured questionnaire, were conducted across the six districts of the metropolitan library service by the author and a group of final year students at her university. Hackman and Oldham's Job Characteristics Model (JCM) framed the study and questionnaire/interview questions' as it did in the author's earlier study of staff in an academic library (Hart 2010).

Overall, the study found quite strong levels of satisfaction. But the findings are complex, varying across the different strata. Perhaps the most encouraging finding is the general satisfaction that comes from strong beliefs in the value of their work in their communities. Many are confident that they are making a difference and many express their pleasure in the positive feedback they receive from their users. Surprisingly perhaps, there are few complaints over pay and benefits. However, a strong thread of comment highlights the pressures of being expected to do more with no increase in resources. Another strong thread of disquiet among the library managers over the increase in bureaucratic paper-work is evident. Many claim that they are no longer librarians serving their community, but rather clerks. It is interesting, however, that the library service is not always blamed for this but rather the parent city's requirements over target-setting, measurement, and documentation.

**Keywords:** Public libraries, Cape Town, Job satisfaction

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## **Study of life in libraries under war conditions**

*Marica Sapro-Ficovic*

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**Abstract:** In 1991 communism collapsed, mostly peacefully, throughout Soviet Union and Eastern Europe. Yugoslavia was an exception. The country, a conglomeration of six regional republics, including Croatia, and two autonomous provinces split up in the 1990s into several independent countries, but not peacefully. Croatia was established in 1991 as a free, democratic, and independent state waging a Homeland War from 1991 to 1995 in its defense. The war was devastating. Many cities, towns, and villages and many cultural institutions were attacked, damaged and even destroyed, including libraries. A number of communities were under lengthy siege. Life went on in these communities

under various emergency adjustments and circumstances. The purpose of this research is to apply a number of qualitative methods in order to explore the life and work of libraries, librarians and users in cities that were under siege during the Homeland war in Croatia. Among others, the objectives are to collect and organize recollections and reflections from librarians about their work in the cities under siege, describe the users and the use of libraries in conditions of war, and contribute evidence about the social role and value of libraries. Theoretical and practical framework incorporates a variety of qualitative methods and approaches: *oral history* for collection and study of historical information about events as recalled by participants; *grounded theory* for analysis of collected interviews; and the notion of *social capital* for a general valuation of libraries. Ten cities under siege throughout the country, involving 14 libraries, were included in this study. Some of these cities were under total siege for a long period of time, others were under partial siege but regularly attacked, shelled and bombarded; one city (Vukovar) was totally leveled, library included. In all these cities libraries functioned during the time of the siege; however, in some of them, libraries were closed for a short period of time. Altogether 50 librarians and 17 library users were interviewed – they provided records of oral history about their recollection of the events and library services and use under siege. All participants, librarians and library users, were presented with information about the topic of the interview and purpose and objectives of the study and signed a statement of informed consent. Interviews were structured, tape recorded, and then transcribed for analysis. Altogether, there were some 54 hours of interviews, with some 435,000 words when transcribed. Following grounded theory, analysis consisted of developing codes about the content of utterances and then coding the utterances in each interview. Finally, codes were cumulated showing the results with comments and illustrative examples quoting directly from interviews. Ten main categories were derived, each with a number of subcategories. Some of the main findings follow – all generalized from oral histories. In all cities libraries worked and functioned for most of the time under siege, often under most difficult conditions: a number of libraries were seriously damaged by the acts of war, one (Vinkovci) burned down. Neither librarians nor users expected the fury of war that unfolded. Libraries were not well prepared to preserve valuable and unique parts of collections. Nor did they have bomb shelters for users and librarians for unexpected attacks and bombardments. Libraries provided user services throughout the siege. Libraries have found a way to remain open for users in the harshest conditions. They were the only cultural institutions that fully functioned in their communities during those times. Most librarians stayed in their communities and worked in libraries for a variety of reasons: job security - not to lose their job, professional obligation, feeling of duty, pride, and sense of resistance. The number of users increased during the siege, as did the borrowing of books. Users took books to shelters and soldiers to the front. Most of the books borrowed were light fiction, thrillers and action books, although a number of users went again through classics. Libraries also were used for events, such as exhibits. A sense of close belonging and camaraderie developed. Librarians sometimes dressed up and prettied themselves in hard moments as sign of defiance. A number of tragic instances were reported – loss of colleagues, children of colleagues, friends, neighbors, as were miraculous instances of staying alive when bombs and grenades hit nearby. Through testimony of librarians and library users, through examples of continuing services under dire circumstances libraries proved their value to their community. Among others, the study contributed evidence about the social role and value of libraries.

**Keywords:** Homeland War, Croatia, 1991-1995, Cities under siege, Libraries, Librarians, Library users, Oral history, Grounded theory, Social capital

# **A study into the quality of ergonomics in librarians' working environments in Islamic Azad Universities of Iran (an Iranian experience)**

*Zahra Abazari, Sayd Rasool Toodar*

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**Abstract:** The main purpose of this study is to conduct research into the effects of librarians' disabilities employed in Islamic Azad University branches (IAU) as well as the root causes on their work.

The presented study is of the descriptive/survey research in which the required data is gathered through the means of a questionnaire distributed among 120 individuals working as librarians in IAU branches. Out of which a total number of 94 individuals have answered the questions. Upon the collection of questionnaires which totaled 99 items, the data was encoded and then imported into the SPSS software.

The results show that about 68 female and 26 male librarians have participated in this research, among whom less than half were from the circulation, a relatively small number from the management, and a similar number were from the technical service section. Besides, a number of librarians were working in more than one section in their libraries. A few also simultaneously handled 5 individual sections. While a larger number of them did not receive any shoulder area strains, more than half of them did so. And although a considerable number of the librarians did not get any sprains in their elbows, there were some who did so. Moreover, more than half of the selectees did not get sprains in the wrist area while a smaller number of them were in trouble with those kinds of sprains. A lot of them did not receive any injuries in the thigh area whereas about one-third of them did so. Despite the fact that a significant number of the selected librarians did not get any sprains in their ankles, a smaller number of them got some sprains in their knees. A limited number of individuals did not have a sprained knee and in contrast, nearly half of them did witness a sprain in their knees.

**Keywords:** Librarians, Islamic Azad University (IAU), Ergonomics, Libraries

# **A study on literature obsolescence and core journals' cost-benefit in citations of "scientific medical journal" of Ahwaz University of Medical Science**

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**Abstract:**

**Introduction:** One of the methods for assign core resources is the citation evaluation. Librarian of the acquisition department can use citation evaluation for identifying core resources. Ordering of these resources besides omitting of unused resources can save budget, place and users' time of library.

**Methods:** This study is a descriptive and cross-sectional survey that used citation analysis. Sampling is objective sampling, and population is 6342 citations of articles have published in Scientific Medical Journal of Ahwaz University of Medical Science. Data collection is done through referring to original documents. Data analysed by using Excel software, descriptive and analytical statistics (cost- benefit formula and Bradford law formula).

**Findings:** Findings showed that average citation for each document is 16. Average citation for each English document is 14, and for each Persian document is one. Literature Obsolescence for Persian references is 15 years and for English references is 20 years. High- used Persian journals in order are: Scientific Medical Journal of Ahwaz, Daru & Darman, Nabz, and Journal of Medical School of Shaid Beheshti University of Medical Sciences. English core journals in order are: Pediatrics, The New England Journal of Medicine, Gastroenterology, and Medicine. All of them are in ISI list and JCR with a high Impact Factor (IF). Cost- benefit analysis of these journals showed they are suitable for those libraries and their users.

**Conclusion:** The authors of this journal intend to use and refer to English resources. Resources that used and cited are obsolescent, and it's necessary that authors use updated and newer resources. Providing of Persian high- used journals and English core journals are continued. The authors use English accredit journals of ISI that shows Scientific Medical Journal of Ahwaz has accredited.

**Keywords:** Cost-benefit, Core journals, Bradford law, Literature obsolescence, Citation analysis, Scientific medical journal of Ahwaz, Iran

## **A survey of components of communication skills and their relationship with demographic characteristics in librarians of Isfahan University and Isfahan University of Medical Sciences**

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Dr. Susan Bahrami, and Rahele Samuei***

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**Abstract:** Since Library and Information Science is one of the jobs that are constantly in touch with users with vary Information needs and different characteristics, it must have strong communication and have the ability to establish communication skills with users. As much, this relationship is appropriately established and effectively expanded, equally the librarian and the library will be more successful in achieving their goals. The purpose of this study is to determine components of communication skills and their relationship with demographic characteristics in librarians of IsfahanUniversity and Isfahan University of Medical Sciences. This study is descriptive survey and data collection tool, is standardized questionnaires of Queendom communication skills. Statistical population includes 117 librarians of academic library in IsfahanUniversity and Isfahan University of Medical Sciences. The sample consists of 117 librarians, and method of sampling is the census. Validity and reliability of questionnaires was confirmed by face and content validity and coefficient of Cronbachs alpha( $r=0/86$ ). Methods of data collection, was personal. Data analyzed by SPSS16 software and two levels of descriptive (MeanandSD) and inferential statistics (T-test, Manova test and LSD). The findings showed that mean of communication skills and components in librarians of IsfahanUniversity and Isfahan

University of Medical Sciences were more than average. The firmly and vision components in male librarians of IsfahanUniversity and Isfahan University of Medical Sciences was Further than women. Setting emotions in the age group 38 to 47 years was more than the librarians in the age group 18 to 37 years. Emotion setting in librarian with diploma degree was less than the librarians, with BA degree.

**Keywords:** Communication skills, IsfahanUniversity, Isfahan University of Medical Sciences, Librarians, Academic libraries

## **A survey of continuing education activities of librarians in Nigerian universities**

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**Abstract:** This paper examines the continuing education activities of librarians working in university libraries in Nigeria with a view to determine the frequency and types of continuing education activities engaged by the librarians, the delivery methods and training sources valued by the respondents, the nature of support received and the constraints to the participation of librarians in continuing education. Based on an extensive examination of relevant literature, a questionnaire was designed by the researcher to collect data from a sample of 216 librarians working in 12 federal university libraries located in different parts of the country. The findings of the study show that although librarians do engage in various CE activities such as reading, attending conferences, research and publication etc, for the purpose of updating their knowledge and skills, they do so, on an ad-hoc and mainly infrequent basis and that the employers of the librarians (workplace) are rated the most important sources/ providers of their CE and training. The research has also found that the best CE delivery method preferred by the subjects is face to face interaction with the teacher/instructor. Although, the types of organizational support for CE received by the librarians revolve around financial support; the most important constraints to the participation of librarians in continuing education activities include inadequate financial support, poor ICT infrastructure, and limited choice of CE offerings/opportunities.

The study recommends that in order to grow and develop their knowledge and skills in an ever changing technological environment, librarians should be more mindful of their continuing education and pursue job-related professional development opportunities hitherto available formally and informally. Training and development opportunities for librarians must be flexible by allowing choice and guidance, where appropriate, for librarians who are at different stages of ICT literacy, who work in or have different job requirements. This suggests that regular needs assessment should inform the design of training and CE programs for librarians in Nigeria because training can fail to deliver real value if implemented on the basis of assumptions alone.

**Keywords:** Continuing education, Professional development, Training, Librarians

## **A survey on information infrastructures in special libraries of Tehran city**

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**Abstract:** This paper aimed at studying of information infrastructure in governmental special libraries, considering specific standards. The purpose of the current study is offering suggestions and strategies to eliminate present problems for better usage of the considered units and improving qualification of offering information services of the special libraries of Tehran city to the users. Current research is a descriptive survey, and data collection was done using questionnaires. According to the existing information in the database of the National Library of Iran, 137 special libraries were located in Tehran, and the questionnaire sent to them by postal services .105 of them replied back the questionnaire.

Result: The number of specialist staffs is not sufficient. Building and equipment quality is very low.

**Keywords:** Information services, Special libraries, Information infrastructure

## **A survey on the status of indexing medical journals in Iran and identification of the involved causes and factors in major global indexes (2005-2010)**

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### **Abstract:**

**Introduction:** journals are one of the main platforms to exchange information between researchers in present world. Journals that indexed in international indexes are the main indicators of knowledge production and global partnerships and representative the rate of the international scientific community. This study is performed with aims to survey on the status of indexing approved medical journals in Iran and identification of the involved causes and factors in major global indexes.

**Materials and methods:** this study is descriptive survey. Statistical population of the study is including all English and other languages journals approved by the Ministry of Health & Medical Education at that time of the survey of 83 titles. Data gathering tool is a researcher made control checklist that is validity was confirmed by experts and specialist in related areas and its reliability was estimated 90% by using Cronbach,s alpha. SPSS software is used for analysis of data to respond to the objectives.

**Results:** The growth rate of medical journals in Pubmed showed that so far some of titles only 8 journals (less than 10%) are indexed in this database. Also in the Islamic World Science Citation Index (ISC) results showed that the growth rate of the journals indexed in this database has been an upward trend, so that by 2010, 50 journals in medical field are indexed.

Status of indexing journals in Scopus and Web of Knowledge (WOS) databases as well as showed 51 titles in Scopus (61%) and 20 titles (24%) are indexed in WOS. Comparison criteria of indexing journals in Pubmed with 75 journals not indexed showed that the criteria of bibliographic data were met in all journals and 5.4 percent website of

journals was independent. Also in 23 journals not indexed in ISC. Comparison criteria of indexing journals in Scopus showed that the criteria of bibliographic data were met in all journals. Possibility of access online of author, editors and reviewers to papers on 87% journals, lack of time in the publication of three recent issues of the journals, in 71% of journals that not indexed and having specialized websites and access to the articles via the WWW in 87% of journals.

Comparison criteria of indexing journals in WOS as well as showed that only 55% of non indexed journals have been met local and foreign editorial board. Having local and external referees have been observed in 67% of none indexed journals.

**Conclusion:** Status of indexing medical sciences journals in WOS, Scopus and ISC relatively have a favorable situation, but in the Pubmed are undesirable. Continuous evaluation based on the criteria acceptance of indexing journals in international indexes in order to keep pace with the global science community and enhance the country's position should be further considered by the Commission journal of Medical Sciences in Ministry of Health & Medical Education.

**Keywords:** Indexing, Iranian medical journals, WOS, Scopus, ISC, Iran

## **Survey says: assessing the social impact of academic library tutoring program on undergraduate success**

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**Abstract:** This presentation will examine how the Florida State University Libraries' late-night peer tutoring program contributes to the social and academic environment cultivated by the Learning Commons. It will address the importance of developing a survey that can help gauge the impact of your programs on student success. In addition, it will show how to interpret the data in relation to your library services and the impact those services may be having on your library's user population. While this tool was used to assess a tutoring program, its applications reach beyond these parameters and can be applied to almost any library service.

During this session, attendees will learn how to develop their own qualitative data tool using a simple survey. They will learn how to evaluate survey data and interpret its impact on their library services and user population. Finally, attendees will learn how the social benefits of a library program can contribute to and bolster the academic benefits already provided.

## **The survival of Guglhupf, Schrammemusi, and other cultural icons: the role of Wikipedia in the preservation of Bavarian Dialects**

*Thomas Walker*

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**Abstract:** The internet has democratized communication in ways that have been impossible to predict. Geographical barriers have been flattened as users of static and interactive internet entities have joined the largest system of information systems in the

history of human civilization. While some languages, notably English, have dominated electronic discourse, the fact that collaborative platforms have become widely used has allowed for the cultivation of virtual communities that aim to preserve languages or dialects spoken by relatively small numbers of people. This paper analyzes the extent to which the Wikipedia articles written in several Bavarian dialects are distinguishable from parallel articles in German and places the dialect articles in thematic and linguistic contexts that are the result of a conscious effort among contributors to promote or preserve the dialects. It is argued that this collaborative or communal perspective, which is fully within the spirit of interactive platforms like Wikipedia, is an approach to the preservation of cultural heritage that has been possible only since the advent of the internet and collaborative platforms.

The paper provides an introduction to the idea of the preservation of cultural heritage, particularly that of the preservation of languages and dialects that are spoken by relatively small populations, some with the very real risk of extinction. Against this context, Wikipedia articles on a variety of topics written in one of the subdialects of Bavarian are analyzed to determine the extent to which they seek to preserve the dialects in which they are written. Potential differences from parallel articles in German may include those that address cultural distinctions, but more especially the linguistic variations that are the hallmark of the various subdialects. Compared are sources of information, vocabulary, and approaches to the orthographical transcription of dialects that exist primarily in the oral tradition, and dialectal designations that identify specific subdialects.

## **SWOT analysis on rural library services serving the minorities**

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Junurham***

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**Abstract:** The aim of this paper is to look at the situation of the rural library services in the context of serving the communities where they operate. This is a case study of one of the village libraries that has been established by the National Library of Malaysia. The library is located at Kemensah village which is in the district of Ulu Kelang in Selangor. The Kemensah village library due to its location has to serve two main communities, the Malays making up approximately sixty percent (60%) of the population of the constituency and the *Orang Asli* or the Aboriginal people comprising forty percent (40%) of the population. Unlike the Malays, the *Orang Asli* mostly come from the deprived groups of the community in terms of income, education, and employment. It was reported that there are only 8 school-going children from the *Orang Asli* community in the village. It is apparent that the Kemensah village library needs to take the necessary measures to encourage and attract the *Orang Asli* families to start coming to the library. It could only perform this role if the library has the strength and the opportunity to improve its services to the Aboriginal people.

A SWOT analysis could provide the necessary information as regard to the strength and opportunity of the village library. Based on the outcome of the SWOT analysis several measures could be undertaken including the promotion of the library services and resources through mass media coverage, promotion of lifelong skills such as organizing activities related to reading and speaking, handicraft work, information tracking, story



telling sessions, sewing and embroidery activities especially customized for minorities in the population.

**Keywords:** Kemensah library, Rural library activities, Serving minorities, Aboriginal community

## **A system dynamics decision support system for the book bank system at Makerere University Library**

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Makerere University Library, Uganda

**Abstract:** The paper is a case study of the acquisition function of the Makerere University Book Bank system. It emerged from the author's Master of Science in Information Systems degree research project at Makerere University. The paper tests and validates a dynamic hypothesis of a simulation Decision Support Tool for evaluating the impact of the critical success factors in collection management (CM) (Mwesigwa, 2012). With the application of the dynamic synthesis methodology as developed by Williams (2002), it was possible to depict acquisitions workflow and stakeholder input in decision making, thereby optimizing CM performance. This paper sets out to discover the critical success factors for an optimized book bank system and to investigate the workflow of the book-bank system, thereby promoting shared understanding amongst stakeholders and providing for stakeholder input. The computer simulations reveal system behavior over time which highlights the sensitivity of the underlying cause and effect factors on the library service. The resulting framework of this work is a decision support system that libraries can adapt to make informed decisions.

**Keywords:** Library acquisitions, Decision support system, Book bank, Makerere University

## **Tag-resource-user: a review of approaches in studying folksonomies**

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**Abstract:** This paper provides insight into main approaches to studying folksonomy based on its tripartite structure "tags-users-resources". By conducting an exhaustive literature review in relevant scientific databases in LIS field, main approaches and methods in analyzing folksonomies are covered. The field of research is approached through three main focuses: (1) *tags* - covering approaches in analyzing tag corpuses and structure; (2) *users* - carrying out studies for diverse communities of practice and (3) *resources* - covering research and methods dealing with the potential of folksonomy in providing new tools for information retrieval.

The area of researching folksonomies is still fairly new, so theoretical perspective and research methods are still being defined. In that light, this paper provides a review of the field of research, and a corresponding framework for the study of the field of folksonomy and social tagging systems.

**Keywords:** Folksonomy, Social tagging, Collaborative tagging, Literature survey

**TCDMeta: a metadata model used to automatically  
create collections and meta-collections of the  
academic content in the institutional repository of the  
Technological Educational Institute of Crete**  
*Nikolaos Tsatsakis, Alexandros Gougousis, Stavroula Varvantaki,  
Georgia Tzedaki, Mihail Panagiotakis*

Technological Educational Institute of Crete, Greece

**Abstract:** An academic institutional repository has to provide the ability of structuring its content throughout its existence, preferably according to a dynamically evolving as well as easily adaptive mechanism which categorizes all items to a multilevel structure.

The description and use of TCDMeta as a metadata model to achieve content categorization into collections and meta-collections for the institutional repository of the TEI of Crete is described in this paper.

The model was built during the debugging process of the descriptive metadata for the collection of the students' diploma theses and will give us the ability to create collections and meta-collections other than those related to faculties, academic departments and years of creation which were used up to now.

The systematic consideration of all items provided us with a distilled knowledge of the content in our institutional repository and designated the main elements of the model: subjects' collections related to carefully chosen keywords from a controlled vocabulary, popular topics' collections that can help in a macroscopic study of the methods, tools, and outcomes that are related to those topics, geographic collections that contain studies and experiments help in certain geographic areas, distinguished theses collections and others.

**Keywords:** Automatic collection creation, Metadata model, Institutional repository

**Teaching-learning process in "Project Management in  
documentation units": a methodological proposal**  
*Rosario Arquero Avilés, Gonzalo Marco Cuenca, Silvia Cobo Serrano  
and L. Fernando Ramos Simón*

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**Abstract:** Practical and applied training in project management is conceived as a relevant issue in the teaching-learning process in Library and Information Science for students who will be future professionals in our expertise field. In line with this premise, the design of a Community of Practice (CoP) is presented as methodological and pioneering proposal in the course "Project Management in Documentation Units" within the "Master in Documentation, Library and Archive Management" in the Faculty of Documentation Sciences at Complutense University of Madrid (Spain). Results are analyzed as a consequence of the CoP implementation and from the students' point of view, who had an active participation in a real training situation.

**Keywords:** Project Management in documentation units, Teaching methodologies, Community of Practice, Professional training, Library and Information Science, Complutense University of Madrid, Spain

## **Teaching approaches of Information Literacy, how to evaluate teaching activity**

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<sup>2</sup>CreteUniversityLibrary, Greece

**Abstract:** Information Literacy has been a key topic in academic library circles for many years, building on the User Education and Information Skills which went before it. The challenge has been to implement one curriculum to demonstrate the importance of being able to identify, locate, retrieve, evaluate and use information effectively is well worth while in developing learning techniques which can be used throughout life. The paper presents experience in TEMPUS PROJECT: 517117-TEMPUS-1-2011-1-IETEMPUS-JPHES, *Developing information literacy for lifelong learning and knowledge economy in Western Balkan countries*, regarding teaching materials and how to evaluate teaching activity. We propose some key performance indicators to be achieved and one electronic questioner was addressed to each student at the end of an IL courses. The Likert scale was adopted for students to specify their level of agreement i.e. strongly agree, Agree, Maybe, Disagree, Strongly disagree. Like one important conclusion to have a higher quality of teaching activity it is essential to gather information which will enable you to assess the effectiveness of teaching and the learning achieved. This will help you identify successes and failures and provide evidence to inform your future practice.

**Keywords:** Information Literacy, Teaching materials, Evaluation, TEMPUS

## **Teaching critical reading in schools and associate with education**

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**Abstract:** In this study, increase student's success level in education and emphasize the importance of critical reading in order to create positive developing in viewpoint with increase their level of consciousness. Also requirement about gain this ability and habit in education process is explain. In this context, reading habit, critical reading education and effect critical reading to education life are examined.

**Keywords:** Critical thinking, Critical reading, Reading, Education, Reading education

## **Teaching information literacy to students in institutions of higher learning: a case study of the University of Zimbabwe Faculty of Law**

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**Abstract:** Information literacy in academic libraries is one of the important aspects of teaching, learning and research in institutions of higher learning. Both students and academic staff engage in a lot of research and in the process they should be able to distinguish scholarly from unauthentic information. Librarians in academic institutions have the responsibility of training information literacy to both students and academic staff. At the Law Library the course is compulsory to all the first year students and is

offered as part of the communication skills course. It is practical based and lectures are held in the Law Library training room. E-resources, reference management software, plagiarism and evaluation of information are the major topics that are covered throughout the semester.

**Keywords:** Legal information literacy, Zimbabwe, University of Zimbabwe, Law Library

## **Technical relevance of keyword searches in fulltext databases**

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**Abstract:** In our presentation we show a method, which makes possible to measure precision of keyword searches executed in full text databases. This method analyses how much information on average is expressed by the context of keywords in connection with a specific keyword in the database. Since the average information content depends on other elements of the database, thus we can consider this method objective. Using this method we can create user types, which categorize people who carry out various searches. We place those individuals in the first category who search for novelties, so they want to find texts with high average information-content. Those persons belong to the second category who search widespread relationships of meaning, as they wish to obtain texts with a low average information-content. In our test we determine the technical relevance of search results, but we take into consideration the user needs through the created user types. Previously we suppose that the average information-content of a textual document reflects its precision. In our analysis we examine this hypothesis in more details. Another interesting question, which emerges during our analysis is how we can use notions of technical relevance and technical precision at keyword searches in a full text database. Finding appropriate answer to this question makes possible that objective and really mathematical methods would appear in the relevance measurement of keyword searches in order to check rather subjective methods.

**Keywords:** Technical relevance, Average information content, Full text databases, Measurement, Keyword searches

## **Text mining, names and cibermedia: a new method to detect the general macrotendencies of online newspapers**

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**Abstract:** The general development of technical facilities has lead to new possibilities to analyze informative texts. This would apply for "text mining", which is a methodological tool, which as started more than fifty years ago. It was associated with linguistic and pragmalinguistic fields but nowadays the popularization of online newspapers

makes it relatively easy to download the digitalized texts. With this presentation we will show how to accomplish a new technique to detect the macro tendencies of the editorial lines. It is a proceeding based in a text-aided quantitative methodology: by counting the frequencies of repetitions of names (persons, places, objects, etcetera) it can be deduced the preference of that media, that we have defined as the “public attitude”. Based on the surprising results of three different cases (International Women’s Day, the taboo around Spanish King Juan Carlos I and the five games played between Real Madrid and Barcelona in the season 2010 – 11), we will introduce the participants into this new method.

## **Thematic identification of “little science”: trends in the Portuguese literature in IS&LS by controlled vocabulary and co-word analysis**

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**Abstract:**Co-word analysis has been efficiently used to identify the main topics and trends of scientific research among different disciplines. Subsequently, the ability to work with increasingly large sets of documents has been pursued and achieved thanks to the development of software for networks analysis and information visualization. Therefore, bibliometric studies dealing with thousands of documents extracted directly from international databases – ISI (Thomson Reuters) on the top –, can be performed in a fully automated process. In this context, and due to the exponential growth of scientific production, there is a comprehensible lack of studies upon “little science”, where it is still possible or even forcible to develop research using human processes for data collection. This is the case of Information Science & Library Science in Portugal, where the scientific community is yet in a consolidation stage and the vast majority of publications are not included in the main international databases, which forces any bibliometric investigation to start from the primary sources. It is true that direct contact with documents is a time consuming task, but, once necessary, it can become an opportunity to develop and compare different methods to approach our objectives.

This paper aims to compare the application of human and automatized methods for thematic identification - classification with controlled vocabulary and co-word analysis -, on a corpus of publications by Portuguese authors in the area of IS&LS, from 2001 to 2012. The purpose was to produce a profile with the trends of that community during this period of time.

In order to identify the principal topics in which are based the development of this discipline in Portugal, we have elected proceedings as our data source. Conferences have been playing an increasing relevant role in scholarly communication, not only because they promote the presentation of the newest issues in each field of knowledge, but also for being the privileged places for scientists to discuss the results of their researches and expand personal social networks. In the case of areas that find themselves in transition from technical and professional profile to scientific one, as it occurs with IS&LS in Portugal, the relevance of analyzing conference literature increases significantly.

For national scientific production, we have collected the 275 papers presented to the National Conference of Librarians, Archivists and Documentalists, from 2001, when the

proceedings were first published in digital support, to 2012, covering five of the eleven editions of this conference (the conference takes place each 3 years). We have also compiled 160 papers from the same period by Portuguese authors at ISI Web of Science. We start to undertake a manual classification of each document, using the list of controlled vocabulary proposed by Kalervo Järvelin and Pertti Vakkari in 1990 for IS&LS, and lately implemented by Emilio Delgado López-Cózar, in 2002. We have developed a second list of terms to add the classification of the different typologies of organizations studied in the literature (libraries, archives, etc.) To process the data resulting from these two classifications we considered the absolute and relative frequency. Only afterwards we have applied co-word analysis to both sets of documents, using Authors' Key Words, testing Pajek and VOSviewer open access software, to avoid any influence of these results on the manual classification.

The application of both methods was evaluated in a systematic way, taking into account the following criteria: time consuming and effort spent; reliability of the results; descriptiveness of the results (completeness and thematic coverage level); flexibility for analyzing the results; comparability with previous studies.

**Keywords:** Thematic identification, Controlled vocabulary analysis, Co-word analysis, Information visualization, "Little science"

## **Towards an intelligent agent solution in information centers: a preliminary study**

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**Abstract:** Human workforce is an important part of community economic development in any economic climate, and certainly even more critical during the financial crises we're experiencing today. The term has come to describe a relatively wide range of activities, policies and programs employed by geographies to create, sustain and retain a viable workforce that can support current and future business and industry. It is a systematic process for identifying the human resources required to meet organizational goals and developing strategies to meet those requirements. It defines the activities necessary to have the right people with the right skills in the right positions at the right time. Information intelligent seeks to help in facilitating the storage and retrieval of information as a result of the activities of the institution which involves a process of managing and maintaining information beginning at creation and ending at disposition. This study aims to examine the intelligent agent practices of three different information centers in Klang Valley which are in Petro Sains, National Archives of Malaysia and Selangor State Library and it will encompassing the involvement of human, record and system resources through semi-structured interview, observation and document analysis. Thus, the objectives of this paper are to design a framework for the intelligence agent solution and to identify the effectual usage of intelligence agent in information centers. In addition, this study also is to describe the type of intelligent agents adopted by those information centers and to understand the level of understanding among the information society. This study is expected to help both public and private institution to plan policies

and necessary measures to improve information management in its sectors and to prepare its future strategic planning.

**Keywords:** Intelligent agent, Information retrieval, Digital library, Electronic records, Web browsers

## **The training needs of employees working in the departments dealing with digital content: comparative study in contexts of Serbian and Estonian libraries**

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**Abstract:** In the ever growing digital environment, new skills are constantly required to satisfy the complex needs of digital users' information flow. New technologies, introduced in the library and digital world, have imposed a need for continual improvements and training of employees. This causes problems in many organizations nowadays. From one hand, CEOs are not about to make changes in order to improve current knowledge and skills of its employees. On the other hand, some of the employees are not ready for the change. Accordingly, there is a need for moving from the old, static way of organizational thinking towards accepting requirements for the constant change. However, the solution can be offered through properly designed training for employees working with the digital content.

Therefore, this study aims to investigate the current situation in implementing training programs in 6 libraries departments in Serbia and Estonia that are dealing with the digital content. The goal of this study is to explore techniques, ideas and methods which these two countries use to invest in employees improvement. The objective of the study is to address the needs of information professionals and library employees to maintain new skills and competences while working in complex digital environment. The main method in the study is on-line survey, consisting of quantitative and open ended qualitative questions. In the focus of investigation are: current situation in the departments dealing with the digital content in the field of training; employees' personal attitudes and job satisfaction, as well as employee's personal feelings and need for self-actualization. In addition to the survey, interviews with experts from the libraries are included in the research.

By listing difficulties in implementing training programs at institutional level and searching for solution and methods in improving services, the study moves to the personal employees' context. In this way, employees' opinion and satisfaction with the programs offered by the institution are identified, giving them the possibility to propose recommendations that can be used for conducting training programs in their libraries.

**Keywords:** Employees, Training, Digital library, Change, On-line survey, Expert interviews, Serbian and Estonian digital departments

## **Transfer of knowledge and new technologies from science to the economy: the example of Polish universities**

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**Abstract:** In the last years it is possible to observe the transfer of the knowledge and new technologies special interest of the European Union in the improvement in the cooperation and the transfer of the knowledge between research centres, the industry and the sector SMEs. Theme of the paper is taking the context of the document *Improving knowledge transfer between research institutions and industry across Europe: embracing open innovation* - Implementing the Lisbon agenda.

On the research processes need to look from the perspective of globalization of markets and industries, digital technology and new information and communication technologies. The paper will be presented - on selected case studies - the systematic steps to inform employees of the economic and SME resource for scientific and technological knowledge available in universities and colleges, taken the initiative to promote and improve the transfer of knowledge, scientific information in the Polish universities, taking into account national and transnational dimension of knowledge transfer.

**Keywords:** Transfer of knowledge, ICT, Science, Economy, Universities, Scientific information, Poland

## **The transformation to an information commons model of library service: a decade of student data**

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**Abstract:** In 2003, E. H. Butler Library at Buffalo State, State University of New York, prepared to engage in its first LibQUAL+® assessment initiative. After receiving its first dataset and analyzing results as compared against the instrument's norms, Butler Library discovered that levels of user satisfaction fell short in all 3 service areas (i.e. Affect of Service, Information Control, and Library as Place) by up to 10 percentile points. Using the quantitative and qualitative results as a guiding framework for service restructuring and departmental reorganization, Butler Library implemented a long-term plan to develop an Information Commons in an attempt to improve patrons' perceptions of library service.



This presentation would provide an overview of the transformational journey of Butler Library to an Information Commons model of service delivery. A decade of cross-sectional LibQUAL+® data collected triennially (2003, 2006, 2009, and 2012) has shown statistically significant changes in users' perceptions of library service quality, thereby validating the Information Commons model. However, between-groups analyses revealed statistically significant differences in perceived service quality between undergraduate and graduate students. We intend to provide hypothetical, data-supported explanations of the differences in service expectations and needs between these student groups. Finally, an integrated strategic planning initiative will highlight ongoing and future efforts to strengthen and improve library service quality aimed toward graduate students. Overall, we hope attendees will learn about the Information Commons model, the importance of systematic data collection, and ongoing, evidence-driven strategic planning and service.

**Keywords:** Library assessment, Information Commons, LibQUAL+(R), Evidence-based decision making, Strategic planning, Graduate students

## **Tutoring an information literacy course – a new challenge for subject librarians**

*Krista Lepik and Vilve Seiler*

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**Abstract:** This paper presents a view to a credit bearing online course about information literacy skills through the eyes of subject librarians as tutors. Several aspects of becoming and being a tutor are outlined, thus providing some useful material for our colleagues who might also consider starting a similar course.

One of the important tasks of subject librarians in the University of Tartu Library is to teach information literacy. In 2006 we developed a model for web-based teaching of information literacy which has deemed useful through following years. Based on the same model we created an advanced course for doctoral students, in this case the course was added to the PhD curricula as a university-wide elective subject.

The course 'Introduction to Information Research' is now integrated into all doctoral curricula as a subject for developing an important lifelong and transferable competency. It is taught every spring semester as a credit bearing course in the virtual learning environment Moodle, about 100 doctoral students enrol each year. The aim of the course is to offer knowledge and practical skills in searching professional scholarly information and in information management – both skills are crucial to complete the doctoral dissertation.

The course is suitable for all specialities as all subject librarians are teaching it by supervising the students of their specialities. For the course, user-centred active learning has been applied as the instructional approach. In frames of course assignments the doctoral students perform information searches relevant for their topic of doctoral dissertation, and receive feedback from subject librarians. In order to obtain effective information searching skills, time and focusing is needed – thus, this course provides the students an opportunity to critically assess or reflect results of information searches and the entire information searching process. What makes the course special is that it is developed and taught by subject librarians.

Conducting a focus group with the subject librarians tutoring the course has given some clear and compact insights about subject librarians' evaluations of the course. Although the profession of a librarian entails an educative component, librarians are not always trained to be teachers. So some of the attention has also been paid to the process of development from a librarian to a tutor. As giving feedback about the course assignments

is not the only task of the subject librarians, a look has been taken to the ways of fitting the work of tutor into other tasks related to the everyday work. Eventually, as mentioned, the subject librarians' evaluations about the pros and cons of the course model are presented.

## **Understanding complex phenomena through an educational lens: the case of fluid reading**

***Irene Lopatovska and M. Cristina Pattuelli***

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**Abstract:** In today's information environment, libraries and information centers are challenged to keep pace with their users changing needs and rising expectations. To meet these challenges, librarians must understand complex social, cultural and technological phenomena. One of the most pressing issues facing libraries today is ability to adapt to the evolving nature of reading practices and the emergence of new reading tools and platforms. While a great deal of research has been conducted on various aspects of the use of e-books in different contexts (Ramaiah, 2012), it is still difficult to predict when and how e-books will be widely adopted.

This work describes a collaborative model of inquiry between libraries and schools of library and information science that engages graduate students in the study of changing reading habits influenced by the emergence of digital media, defined here as *fluid reading*. Specifically, the model provides the methodological framework for a longitudinal research project aimed at increasing our understanding of the factors affecting e-book use. This project enables graduate students of library and information science to develop their empirical reasoning skills by applying research methods to real-world questions. The project provides invaluable learning experiences to students who, under the instructors' supervision, are involved in all the steps required to conduct user studies, from design to data analysis and evaluation, and are exposed to a variety of quantitative and qualitative methods. The results of the research feed directly to the library community and inform its decisions regarding the development of e-books collections and the implementation of e-book services. The work discusses the design and implementation of the collaborative model and its effectiveness in understanding fluid reading in the academic context. It also reports initial findings of the project that investigates faculty and students' reading practices and attitudes towards e-books in several academic library systems in New York City (Lopatovska, Pattuelli, Lange & Ludas, 2013).

**Keywords:** Academic libraries, E-books, Reading practices, Research methods, LIS education

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## Understanding news researchers through a content analysis of dissertations and theses

*Mary Feeney*

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**Abstract:** Understanding and meeting the information needs of researchers is an important role of academic libraries. This presentation describes the methodology and analysis of results of a research study that explored the use of newspapers by scholars in different disciplines. Specifically, the study investigated newspapers used in graduate student research, through a content analysis of English-language dissertations and theses published between 2004 and 2008, identified by searching the Proquest Dissertations and Theses Full-Text database. The research questions explored in this study include: What disciplines utilize newspapers in dissertation and thesis research? Which are used more often in their research – U.S. or non-U.S. newspapers? Do researchers typically consult historical newspapers or current newspapers for their research?

Over 1,800 documents meeting the search parameters were retrieved from the dissertations database. A codebook was developed to define specific variables to be analyzed in the dissertations and theses, including disciplines of the researchers, and the origin and time periods of the newspapers used in their research. A random sample of 321 documents was coded by the author and a research assistant. Inter-coder reliability was calculated using Scott's pi.

The results of the content analysis confirm that there is a wide range of disciplines using newspapers in their research. The results of the study can potentially help libraries better understand the information needs of researchers and demonstrate the importance of ensuring better access to newspapers.

## Understanding the view from the other side of the counter and screen: user-centred service re-engineering in an academic library

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<sup>2</sup>Fyusion Asia Pacific Pty Ltd, Australia

**Abstract:** Macquarie University is one of Australia's leading universities, with an enrollment of over 37,000 students. In 2011, a new Macquarie University Library (MUL) building was opened which, in its design, reflected the changing research and learning behaviours of its users. In 2012, MUL began a review to investigate how it could best structure its services to meet changing behaviours in the new physical space and in the dynamic online environment. This also needed to take into account a key University strategy of moving into online course provision.

The starting point for this review was the Library's clients: MUL sought to understand how clients used its services, which services they valued and whether there were gaps in the services provided. A qualitative research approach was adopted, with specific methods tailored according to the client group. Focus groups were conducted with Library staff, teaching staff and students while in-depth, elite interviews were conducted with senior academics.

This data was reviewed to understand common behaviours across client groups and also the behaviours and preferences that differentiated some groups from others. The resultant analysis provided important insights not only in relation to the management of services but also for the structure of the service delivery department of MUL. Having acquired an understanding of the key requirements of each client group, MUL was able to design service offerings that best responded to the needs and expectations of each group. However, this entailed not only developing distinct service strategies for each client group but also designing an innovative organizational structure to support these strategies.

The changes introduced as a result of this research are ongoing and include:

- Building new departmental and team structures that are client centred with less reliance on professional hierarchies and that are flexible enough to adjust to the changing requirements;
- Building more tailored partnerships with academic staff across their teaching and research roles;
- Supporting the specialization of librarians at a level that is sustainable for staff but also meaningful to academics and students;
- Reviewing the different channels for communicating with students to ensure that information is delivered via channels that are appropriately targeted;
- Engaging with students at a point in time when it is most effective and when they are looking for assistance;
- Taking up opportunities offered by the online environment to extend service delivery off-site and 24/7.

Underpinning these changes is a new way of conceptualizing the work of the Library and Library staff. Previously, services and service structures were designed taking a task oriented approach, with service delivery viewed from the role of the provider. As a result of the service review, MUL is now designing services from the perspective of the user.

## **United we stand: quantitative and qualitative methods to assess cooperation. The URBS libraries network: a case study**

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**Abstract:** This paper describes the quantitative and qualitative methods to assess the sustainability of cooperation models within research libraries networks in the humanities. Changing research environment and budget constraints currently are the main challenges of research libraries networks: to cope with this pressure libraries need to build collective capacity through a strong model of collaboration and partnership and foster closer interaction between actors both from the library and the external world.

In order to build effective and efficient cooperation models research libraries networks will firstly need to share a common vision and a well-focused organization. Nevertheless, a multi-level approach should help them to identify their core functional requirements, the specialized needs of their users and a flexible cooperation structure able to maintain the financial sustainability of the system.

After illustrating the current challenges in the research libraries world, and having identified main international models and best practices, this work presents the methodology and the preliminary results of a research project which surveyed the URBS network, an international consortium of 12 libraries from academic and research institutions of several nations (Austria, Denmark, Finland, Great Britain, Italy, the Netherlands, Norway, Spain, Sweden, Switzerland, the United States) based in Rome, Italy.

By focusing on specific set of objectives, actions, and priorities, the authors combine quantitative and qualitative methods in order to identify strengths and weaknesses of the system and propose priorities and recommendations that should support stakeholders to review their business and organizational plans.

**Keywords:** Research libraries, Library networks, Cooperation, Library evaluation, Library assessment, Bibliometrics

## **Universal bibliographic control through legal deposits: initiatives taken by the SAARC countries**

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**Abstract:** Universal bibliographic control requires that all published and unpublished information currently available in the world be controlled. Although the main purpose of bibliographic control is to list information sources in a systematic manner to enable people to become aware of what information is available where it can be located but all the nations seem to be still struggling to achieve it. Maintenance of an adequate system of recording of all form of published and unpublished information sources in the world which contribute to the sum of human knowledge is becoming main concern for the nations of the world. Bibliographic control includes the creation of instruments, tools or aids to refer to specific information and information sources. In order to achieve bibliographic control, a bibliographic tool or bibliography must be compiled by some national agency. It helps to organise and list information sources to facilitate retrieval. Provision of legal deposits by the national libraries and national bodies has made it possible to a little extent to achieve bibliographic control in some nations. The technological developments have all contributed to the information explosion and abundance of information sources in one hand and these technologies have made it easier also to collect, organise, preserve and retrieve the information. An attempt has been made through this paper to present the provision of legal deposits in SAARC countries which include eight nations viz., Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. Since the inception of SAARC as an organisation of South Asian countries in 1985, its main purpose has been to collective economic, technical, social and cultural development of member states. These countries have been involved in making the provision of legal deposits through some Acts and have worked immensely to achieve bibliographic control in its own nation in particular and in the world in general. The paper also reveals the comparative statements of the role of national libraries and provision of legal deposits.

**Keywords:** Legal deposits, Universal bibliographic control, SAARC Countries, Initiatives

## **Usage analysis of dedicated graduate student study space at an academic library**

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**Abstract:** In 2010, the Kansas State University Libraries reorganized its structure to better support the various groups served by the library. The result was the creation of departments focused on the services provided to the different groups. One of the new departments created was the Department for Faculty and Graduate Services.

Prior to the reorganization, service quality data had begun being collected using LibQUAL+, in addition to conducting focus group sessions. Through these tools and discussions with the Kansas State University Office of Graduate Studies and Graduate Student Council, there was the repeated expressed need for designated/dedicated space for use by only graduate students. With the need so clearly expressed, the Libraries Administration decided to meet this need by identifying and dedicating a specific space for only graduate students to use.

The multi-level, main library, Hale, afforded a natural space found in two rooms located on the third floor, which is the designated quiet study area. Each room comfortably seats about 25 students and is equipped with mobile individual workstations divided with short screen partitions. No other equipment or furniture was placed in the rooms. The rooms were made available the fall 2012. Students wishing to utilize the space request access via an online form. Their graduate status is confirmed by the Libraries and once verified, access is granted via their student identification card. The students have access to the rooms anytime during building hours.

Currently, there is little literature support regarding the use of dedicated graduate student study space in academic libraries, although it is suspected that there are libraries that utilize such space and some institutions may even have dedicated libraries for graduate students. It is also recognized that graduate students have different study habits than undergraduates. Traditionally and generally graduate students' academic goals are more focused with longer-term implications for furthering their academic careers. Their levels of investment in their educational experience are also more critical to their success as graduate students. Therefore, it is important to assess services and space that is specifically focused on graduate students in the effort to enhance their academic endeavors.

Our preliminary assessment consists of two surveys. The first survey is a feedback form to gain a basic understanding of how the rooms are utilized. The form was placed in each room during the inaugural semester (Fall 2012). So far, we have a sample size of 26. The 2<sup>nd</sup> survey will be distributed in the Spring 2013 semester. It is designed to gain a deeper insight into the study and work behavior of the students who use the graduate study space. Cross-tabulations and linear regression will be used to analyze the data. The results will help determine how these rooms could be better suited to meet their needs.

## Usage Factor: a new, usage-based metric for measuring journal impact

*Peter T. Shepherd*

Director, COUNTER

**Abstract:** The inadequacy of currently available citation-based bibliometrics tools for measuring the impact of journals, and of the articles published in them, has been recognized for a number of years. The availability of the majority of significant scholarly journals online, combined with COUNTER-compliant online usage statistics, has led to the development of a new, usage-based measure of journal impact - the journal Usage Factor (UF). Since its inception in 2007 the Usage Factor project has, with the active support of librarians, publishers and researchers, worked to develop a statistically robust journal Usage Factor metric, based on COUNTER-compliant publisher usage data. Now completed, the project outcomes include: a formula for the calculation of Usage Factor; a process for the collection and consolidation of publisher usage data, as well as for the calculation of journal Usage Factors; a sustainable infrastructure to support the ongoing recording and publication, on an open-access basis, of Usage Factors; an independent audit to ensure the integrity of the Usage Factors reported. The Usage Factor project was completed early in 2013 and the resulting Code of Practice for Usage Factors, which is freely available on the COUNTER website, provides a solid basis for the recording, reporting and open-access publication of journal Usage Factors. This paper will describe results of the project, the main features of the Code of Practice, and the next steps which are taking Usage Factor forward to full implementation.

**Keywords:** Bibliometrics, Usage, Usage Factor, Journal impact, COUNTER

## Usage of social networks by libraries: analysing the usage of Facebook by university libraries in Turkey

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**Abstract:** Facebook has become an important Web 2.0 service since it was founded. It is used by many people and institutions for many reasons like getting news, delivering news, sharing, giving demonstrations, communicating and making announcements. Facebook, which has conversation and data transcription features, is also used in academic libraries for certain purposes like communicating with users, announcing the events and introducing the services. However, efficient usage of social networks by libraries should be examined. Within the scope of the research, this awareness was tested for university libraries. Through determined of the research questions 69 of 194 Facebook pages of university libraries were examined; analyses were evaluated. With the data received, suggestions were made about Facebook usages of university libraries.

**Keywords:** Academic library, Facebook, Facebook usages of university libraries

## **The “use” of an electronic resource from a social network analysis perspective**

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**Abstract:** Academic libraries in the United States commonly employ NISO COUNTER statistics to describe the use of their electronic resources, but we know that a “use” is arguably more than a full-text download. This presentation reports on an analysis of data gathered at the Loyola Marymount University (Los Angeles, California) from library reference encounters with patrons during which an electronic resource is mentioned. Social network analysis is used to examine the relationship between a patron, a librarian, and an electronic resource to more fully describe the use of the resource. This research provides a framing mechanism for comparison between traditional COUNTER statistics, proxy server statistics, and the social network analysis perspective.

## **The use of constructive grounded theory method in LIS research to analyse qualitative data**

*Getaneh Alemu, Brett Stevens, Penny Ross and Jane Chandler*

University of Portsmouth, UK

**Abstract:** Whilst there exist three approaches to conducting grounded theory (Glaserian, Glaser, 1978; Straussian, Strauss and Corbin, 1998; and Charmaz’s, Charmaz, 2006), there is little research on which of these approaches is pertinent to the field of Library and Information Science, especially in relation to analysing qualitative data that reflects diverse perspectives. This paper makes a case for the use of a constructivist grounded theory method for qualitative research in digital libraries, with emphasis on its pertinence to analyse emerging issues such as Web 2.0 and socially-constructed (user-generated) metadata approaches. The paper presents experiences and insight gained from completing a PhD research entitled “Theoretical Framework for the Inclusion of Socially-Constructed Metadata in Library Resource Description”, using Charmaz’s (2006) Constructivist Grounded Theory method. In the study, three stages of analysis, namely, Open Coding, Focused Coding and Theoretical Coding, were designed and executed. The paper also presents underlying rationale behind the choice of in-depth interviewing technique, memo writing, the use of NVivo 9, as a computer assisted qualitative data analysis software platform, sampling size determination and the techniques used during the actual interviewing process. While the actual results of the PhD study will be presented separately, this paper mainly focuses on the best practises and lessons learnt from the adoption of the method. The paper highlights on how the method enabled the researcher to conduct iterative scrutiny of the concepts and categories through the method’s memo writing and conceptualisation processes four core categories have emerged. It is argued that a constructive grounded theory approach is fitting to address issues in relation to Web 2.0 and user-driven metadata approaches.



**Keywords:** Constructivist grounded theory method, Library Science research, Qualitative data analysis, Socially-constructed metadata, Standards-based metadata

## **The use of Digital Medical Library by the Iranian faculty members: the case of Bushehr University of Medical Sciences**

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**Abstract:** The purpose of this research was to study the use of Digital Medical Library by faculty members of the University of Medical Sciences of Bushehr, Iran. The researchers also attempted to identify the barriers and limitations which the users meet when using the Library. A questionnaire was used to collect the data and distributed among the total population (114 persons); of these, 81 people completed and returned the questionnaire. The data were analyzed through SPSS 16 and the results are as follows: 89 percent of the respondents use the Digital Medical Library, and the most important motivations for using the Library are conducting research (67%), writing article (65%), and teaching (56%). The most used databases are ScienceDirect, Proquest, and Springer, respectively. The main reasons for the users' satisfaction in using the Library are the number of databases, up-datedness of databases, easy access, and access to full-text of articles. The barriers to optimum use of the Library are the status of the University Internet, lack of full awareness about the availability of databases, and lack of adequate skills in using search-engines.

**Keywords:** Digital Medical Library, Use, Information databases, Faculty members, Bushehr University, Iran

## **Use of focus group method for investigating emerging phenomenon: the case of e-books**

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**Abstract:** In today's information climate, libraries and information organizations are tasked with collecting the highest quality materials in the greatest possible quantity, in the very latest formats. As our information culture becomes increasingly digital, libraries continually strive to meet the evolving information needs of their communities. While significant research has been done on e-books and e-readers in a variety of environments (Ashcroft, 2011), the future of academic reading, specifically the role of e-books and e-readers in traditional academic practices, remains difficult to determine.

In today's context and despite the ubiquity of emerging technologies in academic libraries, some institutions are still reluctant to adopt e-books and/or e-readers for a

variety of reasons, the primary one being cost (Zickuhr, 2012) followed by a lack of awareness regarding e-book availability. This knowledge deficit may be perceived by librarians as a reason to forgo an e-book program altogether (Zickuhr, 2012).

Our paper will report on the study that examined students' reading habits and technology attitudes in the academic institution that does not currently offer e-books. The paper will specifically focus on the strengths and weaknesses of the focus group data collection instrument for understanding emerging technology and attitudes towards it. The paper will review the challenges of the focus group sessions, including maintaining an open conversational environment and establishing consistent definitions of discussion elements. Additionally, the paper will discuss the strategies used to overcome these obstacles, possible implications for future research, focus group instrument design, (including implementation of the conversational focus group model and its effectiveness in furthering our understanding of institutional readiness as it applies to academic libraries and the process of understanding the emerging technologies of e-books/e-readers).

The results of this project will be disbursed directly to the library community to help inform their decisions regarding the emerging technology of e-books and e-readers.

**Keywords:** E-books, E-readers, Academic libraries, LIS education, Research methods

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## **The use of social media as a marketing tool in academic libraries in Uganda: a case study of MakerereUniversity library**

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MakerereUniversityLibrary, Uganda

**Abstract:** Academic libraries are facing tremendous changes which have been due to technological advancements. The paradigm shift such as the use of web 2.0 tools for interaction, marketing and collaboration; provision of mobile library services; library instructions among others. These services are introduced so as to improve and extend library services to meet user needs in a way that the libraries get to market their services. In developed countries, the use of web 2.0/social networking sites such as instant messaging, podcasts, wikis, blogs, RSS feeds etc in academic libraries are evident and these services have improved service delivery in one way or the other. Although individually some librarians in Uganda use web 2.0 and web 3.0 tools, they have not gone ahead to provide such services to market library resources. This paper aims to explore the social media/web 2.0 tools that academic libraries can implement for purposes of marketing library services and resources to the library users. It also highlights the implications of the tools to the users and the librarians in Uganda. The study will be informed by the review of related literature. It will adopt a mixed research approach; study population will be senior practicing Librarians and library users. Findings of the study will be used for continuing education in Uganda. Lessons drawn

will enrich the practical knowledge and skills in the emerging trends in Library work and service.

**Use marketing as a strategy for skill development.  
Ipads, QR, AR – our journey from printed book  
collections to social place  
*Linda Vidlund and Cecilia Petersson***

Uppsala University Library, Uppsala, Sweden

**Abstract:** In 2010 we started to talk about how to make our digital materials more visible in the physical library. For years we have talked about how to improve the library catalogue. *But what if our borrowers just ignore the catalogue and go straight to the shelves?*

Around 2010, QR codes weren't so common. We did a pretty thorough preparatory work by involving researchers, students and colleagues via different meeting methods to see if we were on the right track. And we were! We focused on displays, photo frames and QR codes. Then it became professional development of colleagues and us through training in imaging, writing lyrics, the visibility of the screens and thinking in different ways. We involved everyone from acquisition librarians to teaching librarians. We did evaluate our work. The result told us that both the academic staffs and the student's attitudes had changed to more positive toward e-books since 2010.

Our next step had to be tablets. More students are using them; the library buy e-books and e-resources without thinking on usability and not many librarians or other staff had any own experience in reading e-books or using tablets.

So we bought iPads to all our units within Uppsala university library and followed up with workshops. We started "read an e-book anyway you like" to encourage our colleagues to read e-books. Later we met up and discussed pro and cons. Together we learned a lot and our services and our information desks were enhanced. Students and researchers were then invited on various campuses to something we called: become mobile academics! There, we gave practical tips on how to successfully use tablets in research and studies through various apps, and what's important to remember when our resources are used via tablets. We have successfully been using QR codes for one and a half years to promote e-resources in the physical library premises. We will now proceed to make use of augmented reality to further promote and market our buildings, services and materials. The idea is to bring out our resources so they are already visible outside the library premises. Just by scanning the main building of Uppsala university library, Carolina Rediviva, with your mobile device you will get information on opening hours, chat capabilities, the different services, Search in our Discovery tool or watch the Silver bible etc.

Recent statistics show that a large proportion of Swedes now own a smartphone. This means that they are able to use the technology that makes it possible to read our resources on mobile phones. This places new demands on us as librarians. Librarian's role is changing all the time. We must reach out to users to ensure our financial position and the University. Our goal is to create an attractive and accessible library that can be accessed by the virtual and the physical world. The AR can get both! We demonstrate through practical tips on how to market successfully and simultaneously competence raising their colleagues and also create good cooperation between the devices and the ability to share.

# Users' perceptions of Makerere University Library Services

*Agnes Namaganda and Patrick Sekikome*

MakerereUniversityLibrary, Uganda

**Abstract:** This paper presents findings of the 2012 review of Makerere University Library (MakLib) services. The aim of the study was to gain an insight into the attitudes of users towards the Library and to determine whether the users' needs were being met. The research design was exploratory in nature. The study adopted a qualitative research design to provide opinions about users' information needs, experiences, and their recommendations. The quantitative design consisted of both printed and online survey aimed at obtaining a measure of the overall levels of satisfaction and attitudes to particular aspects of service delivery. Key findings indicated that, the library users are satisfied with a wide range of information services available. However, computer hardware and software, technical support and training were all identified as significant technological needs. In addition, there is a wide gap in the staffing levels within the library, therefore, there is need to recruit more staff. Greater emphasis should be put on induction and User Education programmes.

**Keywords:** Library users, Perceptions, Library services, Makerere University, Uganda

# Usefulness as a tool for digital library evaluation

*Melissa Lamont*

San Diego State University, USA

**Abstract:** The literature is rife with theories, models and some actual evaluations of digital library interfaces and performance measurements. These technical and human-computer interaction studies fall under the broader topic of usability. Another aspect of digital library evaluation, less analyzed and less discussed is usefulness. Usability is relatively easier to define and easier to measure; it lends itself more to quantification. Usefulness, however, assesses the users' ability to locate, access, understand, and apply a digital resource. Generally, a useful digital resource fulfils an information need in an efficient manner. If usefulness could be measured, the data could be used to prioritize future projects as developers would better understand users' expectations. Also, usefulness will aid the promotion of existing services since the resources may be of value to a broader constituency than the intended target audience. Further, usefulness could be used to further inform cost-benefit analysis. In an era of constricted budgets, the developers of digital libraries must demonstrate return-on-investment, and will want as much data as possible to exhibit the value of the digital library.

The goal of this research project is to develop testing methods for usefulness that could be applied across multiple and diverse digital projects. The tests would be expected to generate modifications to improve existing services and assist in the prioritization of potential projects. This paper investigates research from information science, library science, business, and computer science. The paper draws from previous research to determine the most widely accepted definitions for usefulness and to collate the methods and techniques of measuring the usefulness of digital libraries, digital collections and online services. Research included locating theories and models for measuring

usefulness; actual tests and their results; changes and modifications made to online services based upon the results of usefulness testing.

Grounded upon the evidence, test methods and questions were developed and preliminary testing is under way. This initial work is intended to refine the potential methods and tests to determine the strategies that best result in viable and actionable data. The full paper will include a discussion of the preliminary results.

**Keywords:** Digital libraries, Evaluation, Testing, Usefulness

## **Using multicriteria methods to decide about the acquisition of new titles in an academic library**

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<sup>2</sup>University of Piraeus Library, Greece

**Abstract:** One major problem that modern Academic Libraries have to confront is how they can improve their books' collection by the acquisition of new and existing titles. How they can decide what titles will be acquired especially if relevant proposed lists of titles are huge?

This paper describes how multicriteria analysis methods can be used to help Librarians to decide about acquisitions of new or existing titles. Multicriteria analysis considers criteria and importance of them, defined from the Librarians to obtain the best solution. In the examined case the problem is how a Librarian will decide at the beginning of the year what titles will be acquired. To do this he has to define some criteria that are depended of the Library's role. In Academic Libraries, that is libraries involved in curriculum and offering loan services, important criteria have to be considered: title's cost, importance of title's subject for the Institution, users' demands for specific subjects and users' demands for existing titles.

This particular work explains how multicriteria analysis can be used in order to find the best solution according to referred criteria for the acquisition of new or existing titles.

**Keywords:** Multicriteria analysis, Book collection improvement, Strategic planning, Quality management

## **Using phenomenology to improve information literacy curricular planning and design**

*Ann Cullen*

Simmons College, USA

**Abstract:** This study took the form of a phenomenological qualitative study of the impressions of faculty experts in adult learning and knowledge management respectively of a conceptual framework for information literacy instructional design in Master of Business Administration (MBA) programs devised by the researcher. The purpose of this study sought to answer the research question: When devising frameworks to assist with information literacy curricular design, can getting input from faculty in related relevant fields outside of Library and Information Science (LIS) be of assistance in making them more robust? The perspectives of knowledge management and adult learning were sought because they were the two areas outside of the LIS field found to be relevant for

their pertinence to the MBA curriculum in creating the conceptual framework. The individuals identified were also selected for their accessibility to the researcher as a means to test her hypothesis about getting input from relevant non-LIS experts. Following the guidelines of Moustakis (1994) data was collected in the form of semi-structured interviews to gather respondents' impressions and perceptions given their expertise. The data collected sought to explicate phenomena surrounding the research question proposed to gauge the usefulness of taking a broader view when conceiving IL instructional design. This research seeks to build on previous research (Boon, Johnston & Webber, 2007) by highlighting the usefulness of employing phenomenological methods in getting input from faculty on information literacy instruction. It also tested out a new way of conducting this sort of research through the use of getting experts reactions to a conceptual framework used as a prop to dig deeper into the phenomena of information literacy.

**Keywords:** Phenomenology, Information Literacy, MBA programs

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Doi:10.4135/9781412995658

## View point survey of the Isfahan province's health managers of reliance information system on the nine philosophy principles of (PHC)\* *Asadollah Shams Falavarjani, Zohreh Shams Falavarjani*

Isfahan University of Medical Sciences, Iran

**Abstract: Introduction:** Now more than ever we have forgotten that solving health problems that are related to what people should do for themselves. Nine philosophical principles of PHC focuses on people's participate, Reliable information, etc. The main objective of this study is determining knowledge of different health institution's managers about nine philosophical principles of (PHC) especially Reliable information system and technology.

**Methods:** The used method was Descriptive-Analysis. Research tools have been administrated questionnaire about 9 philosophical principles of PHC. Study population of 384 individual of top, middle-level and executive managers of Isfahan health centers have been considered. Data entered into computer software (spss). T-test and Pearson correlation analysis was used for analysis.

**Result:** Knowledge mean and standard deviation of nine philosophical principles of PHC were as following:

- Motivation and passion to serve the people with (98.39%), reliance information system with (97.60%), Inter-sectoral collaboration with (92.59%), technology with (89.29%), universality of services with (82.58%), Community participation with (82.18%), support and falsities with (79.30%), government's political commitment with (78.67%), equal distribution with (65.57%) and Mean of all data was (80.89%).

**Conclusion:** The PHC knowledge scores of all managers' levels were above eighty score. But knowledge of top managers particularly knowledge of trustworthy information were lower than the others. Therefore top managers should try more than ever for their

knowledge promotion in health system. Reliance Information system was second score and technology also was forth score in nine PHC dimensions.

**Keywords:** Knowledge, Primary Health Care (PHC), Health managers, Nine philosophical principles of PHC, Reliance information and technology

## **A virtual ethnographic approach to knowledge sharing: tracking tacit clues on Food52**

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**Abstract:** The challenge of knowledge sharing in online environments is already well established as an important and genuine problem. Furthermore, an aim among scholars and professionals consists in providing spaces where participation and engagement are instigated. In this work we concentrate on understanding the phenomenon of tacit knowledge and the ways people engage in trying to reach and share this unspeakable mental process in online environments. This cognitive activity is especially recognizable where experience, emotions and skills play an important role. Furthermore, it is only possible to be represented by abstractions and impossible to be explained on its full significance. Distributed cognition is embraced as the theoretical framework used in this study. According to this theory, the knowledge process is *per se* distributed between and within its agents, tools and environment (Hollan et al, 2000). Although the cognitive process is dependent on the whole context, the epistemic understanding is personal and cannot be completely transferred due to its attached tacit dimension (Polanyi, 1966). Since we are especially interested in the tacit aspect, it is the purpose to identify a community in which there are high levels of discussions regarding know-how. The discussions taken place on the online community Food52 were selected to be analysed. This is an online community dedicated to the exchange of information about cookery and recipes. Cooking is a skill highly related to tacit knowledge, since it involves not only specific motor skills, but also subjectivities related to perception and emotional responses. To conduct the study we applied an online ethnography, a qualitative method suitable to study the mentioned phenomenon in the network. This method is an appropriation that comes from the field of anthropology and it aims to understand the dynamics, behaviours and interactions between users in online communities (Skgeby 2011). The study is based in the social extent of cognition which is related to the human power in conveying and exchanging knowledge. However, it is not possible to rely in the tacit dimension to analysing exchange of tacit knowledge since what is tacit cannot be articulated. It is argued that the study of tacit knowing can be accomplished by looking at a process called chance seeking (Bardone, 2011). It is basically attempts in sharing focal awareness through a process that is composed by continual, iterative and incremental cycles; where one tries to look for resemblance of meaning in the external environment to exemplify something that cannot be explicitly expressed.

**Keywords:** Tacit knowledge, Knowledge sharing, Cognition, Social dimension, Collaborative environment, Social networks

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## **Web2.0 use for internal knowledge sharing in Power Ministry special libraries**

***Maryam Zakerhamidi, Jairan Khansari***

Tavanir Organization, Iran Power Ministry (Ministry of Energy), Tehran, Iran

**Abstract:** Today a wide range of Web 2.0 applications such as Library 2.0 has brought attention to the value of social media for service delivery. The use of web 2.0 tools for internal knowledge sharing among special libraries in power ministry remains largely unexplored because the lacked of library portals interactivity and the content was often out of date. This study described here concerns a study to investigate the acceptability and effectiveness of using Web 2.0 as an aid to knowledge sharing through semi-structured interviews with 15 librarians, examines the current use of Web2.0 by librarians at special libraries in Iran power ministry for internal communication. Data collection has been achieved through the use of in-depth, semi-structured interviews. Ranging from 40-90 minutes, these interviews explored participants' preferred modes of communication, impressions of how the organizational community is facilitated by the use of an internal portal, how they personally make use of the portal, and how their use of it compares to the ways in which they use other social media professionally and recreationally.

**Keywords:** Web2.0, Knowledge sharing, Special libraries, Library portal, Power ministry

## **Web hosting and web design tools**

***Dr. S. Machendranath, Dr. Umesha Naik***

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**Abstract:** The primary function of the contemporary academic library Web site is to connect a user to content, be it an article database, e-book or e-journal article, and to do it with minimal barriers and maximum speed and ease. The web is a huge repository of information and there is a need for categorizing web documents to facilitate the indexing, search and retrieval of pages. However, web documents have a lot of information contained in their structure, images, audio video etc present in them. The WWW is a vast repository of information. Web sites belonging to the hidden Web have a surprisingly uniform structure. Many Web sites, especially those that dynamically generate HTML pages to display the results of a user's query present information in the form of list or tables. This paper describes an approach to automatic extraction and segmentation of records from Web tables.



**Keywords:** Web site, Home page, Web design, Web hosting, Web tools and plug-ins, Web server, Web browser

## **What do people do at the library?**

*Malin Ogland*

Stockholm Regional Library, Sweden

**Abstract:** In Sweden, e-book lending is strongly increasing and questions rose whether we need physical library space at all when all the material can be downloaded from the Web. But the statistics also show that visits to public libraries in StockholmCounty are increasing. What is the reason for visits to public libraries are increasing? What in the library's selection do visitors want to use? What are their needs?

Stockholm Regional Library has for some years been using different observation methods to find out what people do in libraries. The aim is to increase knowledge about the physical library area utilized and develop a basis for discussion on how our future library room should look like if the bookshelves are becoming fewer.

**Keywords:** Public libraries, Observations

## **Which way Zimbabwe National Bibliography? Challenges of enforcing legal deposit in the context of Information and Communication Technologies (ICT's)**

*Collence T. Chisita*

Zimbabwe

**Abstract:** The pervasive nature of Information and Communication Technologies makes it imperative to explore the challenges of enforcing legal deposit in the context of Internet. This paper seeks to describe the functions of current local legislation in ensuring compliance to legal deposit laws of Zimbabwe. It will also seek to highlight the challenges that the current legal deposit laws face in the context of virtual resources. It will describe the current legislation that deals with bibliographic compilation and explain problems associated with current laws in the context of the information society/knowledge society. The writer will seek to examine the extent to which writers, researchers, and other stakeholders in the creative productions industry are adhering to the stipulations of the Printed Publications Act with reference to bibliographic control. The paper will also explain the weaknesses of the current law with reference to legal deposit. It will also assess the impact of the failure to produce the National Bibliography on Universal Bibliographic control and also on scholars and researchers. The writer will also explain how the absence of a print and online version impact on collection development and scholarly research. The paper will also explore the challenges of harmonizing print and electronic resources in the context of digital divide. The paper will also suggest possible ways to utilise ICT's to capture and preserve local intellectual heritage for posterity and avoid national amnesia. It also aims to explore how effective bibliographic control can facilitate access to information for all.

**Keywords:** Legal deposit, Bibliographic control, Legislation, Virtual resources, Digital divide, Information and Communication Technology (ICT's), Online resources

## **Will Mobile Web Era impact the user's behaviour in a digital library?**

***Marco Scarnò, Donatella Sforzini, Ugo Contino, Paola Gargiulo***

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**Abstract:** Almost 10 million of articles were disseminated through the web by CINECA. These are accessed by many academic Italian institutions located in the Centre-South of Italy. In order to be prepared for the "Mobile Web Era", it was realized an optimized version of the website to facilitate the "experience of the mobile users".

We analysed the behaviour of such users and of the *wired connected* ones; to do this we considered their "traces" stored into the web server log file. Some results are expected, like more browsing and less downloads; other surprising, like people that access the digital library only through a mobile device.

**Keywords:** Digital Library, Web mining, Web server log file, user's behaviour, search engine, Journal browsing, Mobile Web Era

## **Posters**

### **5 findings for instruction jobs: results from a job ad analysis**

***Melissa Gold***

Science Librarian, Millersville University Library, USA

**Abstract:** Learn key findings from a content analysis of over 200 job advertisements for instruction librarian positions across the United States. Job advertisements from January to June of 2012 were examined to determine whether skills detailed in ACRL's Standards for Proficiencies for Instruction Librarians and Coordinators were being utilized by employers in current job advertisements. This poster will present select findings from the study, providing a snapshot of what employers are looking for and who is doing the looking. Graphics will highlight the most in-demand skills, distribution of jobs based on location and Carnegie Classification, trends in position titles, and more.

**Keywords:** Academic libraries, Instruction, Job advertisements, Content analysis

## **Building a bridge from Nebraska to Nicaragua: Information Literacy and writing, one step at a time**

*Marvel Maring<sup>1</sup> and Joan Latchaw<sup>2</sup>*

<sup>1</sup>Associate Professor, Fine Arts and Humanities Reference Librarian, The Dr. C.C. and Mabel L. Criss Library

<sup>2</sup>Associate Professor, ASH English Department, The University of NE at Omaha, USA

**Abstract:** Global engagement has a high priority at the University of Nebraska at Omaha and initiatives to expand student exchanges and collaborative research with sibling institutions is written into the University's strategic plan. One recent project involves the enhancement of information literacy and writing skills in the English Department curriculum of our sibling institution in the Universidad Nacional Autónoma de Nicaragua León. This collaboration between a reference librarian and two English Department faculty has been illuminating, allowing each to learn more of the nuances of how to design exercises and assignments that integrate the writing and research more closely. Additionally, our Nicaraguan colleagues have shown their strengths in the quality of their students' action research and verbal language skills.

Joint research projects have been ongoing for more than a decade between both universities but in the last five years, a reference librarian has played a key role. This is the first time the librarian and the U.S. English faculty have collaborated on a data gathering project to integrate library research with writing enhancement in Nicaragua. Through surveys, focus groups, classroom observation and writing sample analysis, the UNO team has gathered valuable data that is informing the basis of ongoing training to expand the writing curriculum and to integrate information literacy skill development into the classroom. The first week-long workshop based on the data we gathered will occur in February 2013 and we are developing a 6-week *Diplomato* certificate program to provide more professional development opportunities for the UNAN English Department faculty. Using services like *LibGuides* has been a way to help our colleagues navigate the vast information sources from our home institution. In addition to providing electronic access to resources, we have an ongoing commitment to build the UNAN print collection, focusing on English as a Second Language pedagogy and Information Literacy.

## **Collaborative network of scientific information and the popularization of science**

*Lúcia Maria S.V. Costa Ramos and Rubenildo Oliveira da Costa*

University of Sao Paulo, Brazil

**Abstract.** The network of scientific information and the challenge for specialized information services act on scientific dissemination and other actions aimed at popularizing science. The Network SIEO - Specialized Information System in Dentistry Area of Virtual Health Library Dentistry Brazil is a model of Collaborative Network of Information, currently composed by seventeen university libraries, can, beyond support to scientific development, act as one of pillar of Public Policy of Oral Health, contributing with the Education and Information of popular communities through Science Communication. Results show that, from the viewpoint of the organizational

structure and operational and quality, although the network is prepared for their collections, the lack of financial resources and of qualified staff for generation of specific materials for science communication and actions in favor of the popularization of science inhibits the possibilities taking immediate advantage of this potential. We observed that the XXI century displays unprecedented scientific advances, with numerous benefits to society, but we also realize that many of these benefits is distributed so visibly uneven. To solve this inequality, this study focuses on the potential performance of cooperative networks of information on science popularization considering the organizational challenges (infrastructure, human resources, senior management commitment) that Network like SIEO would have to act in this new environment. In this sense, the dissemination of Science and Technology (S & T) has been commonly understood as a process of simplification, seeks to translate the scientific knowledge of experts to non-experts (MYERS, 2003) and that happens as a subsequent activity and differentiated of knowledge production.

**Keywords:** Network of scientific information, Popularization of science, Scientific communication, Organizational Structure.

## **Downsides of Impact Factor as a valid criterion of quality publications**

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<sup>2</sup>Department of Metallurgical Engineering, Kwara State Polytechnic, Ilorin, Nigeria

**Abstract:** The aim of this paper is to examine the validity of impact factor as a metric for evaluation of scientific output of researchers, laboratories, departments and their institutions. The opinion that Impact Factor (IF) is an index that expresses the quality and scientific value of a given researcher/author; departments and their institutions is examined against the critical view point in clinical medicine. Sociological and statistical factors are also considered. Attempt is also made to elucidate on what citation exactly should count for quality in determination of values of IF. Citation frequency as a measure of journal's importance to its end users is considered to be a plausible theory in clinical medicine. Sociological and statistical factors are also seen to have effects on values of IF across subject areas. It is also found out that a count of citations to error in calculation of IF value does not reflect a true value of quality. Appropriate count that reflects quality should be used to compute IF values. Many previous critiques have developed to undermine the use of IF as a metric for evaluation of scientific output of researchers/authors. This article forms the first attempt to identify that all citations to an article do not necessarily count for quality. In this context, the article is original and of great potentials.

**Keywords:** Impact Factor, Citation Index, H-Index, Bibliometrics, Bibliographic database

## **E-book adoption as diffusion of innovation**

*Leanora Lange*

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**Abstract:** This poster uses Rogers' (1995) concept of innovation diffusion to visualize the adoption of e-books among library and information science students at an institution that does not offer support for this technology in the academic library.

While much literature has discussed factors influencing the introduction and adoption of e-books into academic library settings (Lopatovska et al, 2013; Revelle, Messner, Shrimplin, & Hurst, 2012; Joint Information Systems Committee, 2009), studies have not addressed e-book adoption and use among populations that do not have institutional access to e-books. A study was conducted in fall 2012 by a small undergraduate- and graduate degree granting institution that does not currently offer e-books through its library to determine how students studying Library and Information Science (LIS) at this institution use e-books for academic purposes. To collect quantitative data on e-book use among this population, a survey was sent out via the LIS school's listserv, while qualitative data was gathered in focus groups and through individual interviews. The results of this study show that, despite not having access to e-books through their institution's library, LIS students actively circumnavigate barriers of access to use e-books for their coursework and research.

This becomes a useful case study for technology adoption when framed with the concept of innovation diffusion (Rogers, 1995). The use of e-books for academic purposes can be understood as an innovative practice LIS students regularly engage in despite lack of institutional support. Participants' discussions of the reasons that they use e-books demonstrate both Rogers' concept of innovation evaluation (how users assess the expected consequences of a new idea) as well as Rogers' characteristics of an innovation that lead a population to adopt it more readily: relative advantage, compatibility, complexity, trialability, and observability. That participants' definitions of e-books were varied and changeable further supports its novelty. This poster uses these components of innovation diffusion to visualize how e-books have been adopted despite barriers in the academic library environment and thereby calls for academic libraries to address students' growing needs for digital resources.

**Keywords:** E-book, Innovation diffusion, Adoption

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# **The escape of the Brazilian scientific articles of high impact**

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University of Sao Paulo, Brazil

**Abstract:** From 2008 to 2011, there was a 240% increase (from 31 to 111) the number of titles of Brazilian journals indexed in the JCR (Journal Citation Report), database that calculates the Impact Factor of scientific journals (PACKER, 2012), reflecting in the increase of Brazil's classification Ranking of indexed articles.

However, it has been observed the low performance of these titles in the last editions of the JCR, subject of discussion in the editions of 2010, 2011 and 2012 of the Evaluation Seminar of Brazilian journals in the JCR, event promoted by SciELO (Scientific Electronic Library Online) and FAPESP (Foundation for Research Support of the State of Sao Paulo).

It is believed in the existence of a vicious circle that prevents the increase in the Impact Factor of Brazilian journals. If on one hand the Brazilian researchers prefer to publish their research with the greatest impact in titles of foreign journals with high Impact Factor, citing the same titles; on the other hand, the Brazilian journals tend to publish more articles of Brazilian researchers (even from its own institution - high index of endogeneity) and citations received are in mostly of researchers and / or Brazilian journals.

From this hypothesis, the objective is to calculate the Impact Factor of journals from the scientific production of University of Sao Paulo (USP) in Dentistry area, comparing the behavior of researchers publishing in Brazilians journals and foreigners. And, with that, show that it is possible to evaluate the scientific besides of bibliometric indicators of scientific journals available by citation databases SJR/Scopus e JCR/Web of Science.

Keywords: Free Access, Brazilian journals, Impact Factor

# **Estimation of user satisfaction in academic libraries: an multi-dimentional evaluation model**

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**Abstract:** This study is to propose a multi-dimensional evaluation model to assess user satisfaction in academic libraries. This model posits four dimensions related to user satisfaction, including collections, staff, accessibility, and space. For each dimension, we proposed three to five measurement items as follows: (1) collection: amount, coverage, and recency; (2) staff: reliability, responsiveness, expertise, willingness to help, and friendliness; (3) accessibility: navigability, organization, and availability; and (4) space: stack space, comfortableness, available seats, and studying area. The model also includes a measure of overall satisfaction. To test the reliability and validity, a survey was administered using the instrument proposed herein. All the items of the instrument were measured in seven-point Likert scale. In total, 162 students participated in the survey in a research university in Seoul, Korea. The reliability of the instrument was inspected based on Cronbach's alpha tests. An alpha value was 0.937 for all sixteen variables. For

individual dimensions, alpha values of 0.772, 0.941, 0.898, and 0.896 were obtained for collections, staff, accessibility, and space dimensions respectively. To examine the validity, we carried out a factor analysis using Varimax method. The factor analysis result accounted for 77.92% of total variance at an Eigen-value of 1.054. Four components emerged from the factor analysis, and sixteen items adequately explained four dimensions as we intended. Finally, we examined causal relationships between the four dimensions and user satisfaction in an attempt to verify whether the model can be applied to assess user satisfaction. A multiple regression was conducted using the obtained factor scores. The regression analysis exhibited the following user satisfaction model ( $R^2=0.635$ ): [user satisfaction] = 5.778 + 0.720\*[collection] + 0.846\*[staff] + 0.597\*[accessibility] + 0.627\*[space]. This model can be useful to estimate user satisfaction based on a user survey method in academic libraries.

**Keywords:** User satisfaction, Academic libraries, Factor analysis, Multiple regression

## **From photography like a document to viral photography: the photographic text on social networks: a qualitative - quantitative study**

*Dr. Max Römer, Dr. Emeterio Díez*

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**Abstract:** Based on the design and exploratory comparative qualitative-quantitative two phases research in which the second is the development of the first product, the research group at the University Camilo José Cela, JUVETEN, has paid attention to the new treatment that photography has on social networks and, more particularly among the young.

The design is based on the need to explore what was not possible to measure: the elements of photography and their interactions through the walls of the users. For the analysis of these elements, we create a photographic and interactive matrix that allowed us to identify the elements they contained photographs of profiles Tuenti (Spanish social network for teens like Facebook) and then quantify these elements to identify the variables explored by groups to explain the phenomenon of the photographs of the profiles (Creswell, Plano Clark, et al., 2003) and thus assess why a picture can become viral.

The picture looked a declining media facing camera for video and audiovisual, recovering with social networking class protagonism. Every day millions of photos are uploaded to the network, but how. What does "Tag", "Share", "Like"? How do the "Comments"? How many "Walls" is a photo? The old system of textual analysis of the photograph (dating, context, scale, color, depth ...) is only part of the analysis. The emergence of a receptor involved in the text and acting as issuer received obliges us to find out how young people use the photos in social networks, we have to rethink the theory and method of photographic interpretation of the text.

**Keywords:** Social networks, Qualitative-quantitative methods, Semiotics, Photography profiles

## **Having a critical friend to take on new pedagogic challenges for academic librarians – a case study**

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### **Abstract:**

#### **New pedagogic challenges for librarians**

The role of the academic librarian has increasingly become one of an educator while information literacy has become a part of higher education curricula. Thus, knowledge of theories on learning and learning styles becomes new prerequisites for academic librarians. Peer feedback can play an important part in developing the academic librarian's role as a teacher.

#### **The Critical Friend - a method for peer feedback**

The critical friend method is used in various educational settings to facilitate the process of continuous improvement in teaching. The aim of this study was to implement the critical friend method and to establish whether this method could be used for feedback on teaching as part of a librarians' professional development. The project was carried out within the Library Unit of the Faculty of Medicine at Lund University, Sweden. Seven librarians and one teacher from the Centre for Teaching and Learning participated. These worked in pairs; the performance of one teacher and the associated classroom activities were observed by the critical friend, and then evaluated and discussed.

#### **The Case Study**

After two preparatory group meetings, a final meeting was held where all pairs reported what they had done and how they perceived the critical friend process. The experiences of the participating librarians were explored using a questionnaire of seven open-ended questions. Two of the librarians evaluated independently the questionnaire responses by content analysis. The results suggest that use of the critical friend method can have a positive impact by achieving the following: strengthening shared values concerning teaching issues; promoting self-reflection on teaching; facilitating communication with colleagues; and reducing the sense of 'loneliness' in teaching. The value of working in an environment with a structured use of feedback has the potential to create continuity for both the individual professional and the entire organization.

## **Improving educational practice with mixed methods research: training and innovation in university teaching**

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**Abstract:** The aim of the study was to improve educational practice using mixed methods research on college students in a blended learning environment. The study sample was made of 55 university students enrolled in the subjects 'History and Current International Education' and 'Research Methods Education'.

The research design was exploratory sequential, a mixed method. Firstly, a qualitative analysis was focused on a content analysis about asynchronous communication between students and teachers via emails and consultation forums. Next, a rating scale was created from the emerging categories of the qualitative analysis. The rating scale was applied to understand the sample students' perception of asynchronous. This type of design, explanatory sequential, consists of two stages. The analysis of the first phase is qualitative and it is used for the quantitative analysis of the second phase (Creswell and Plano-Clark, 2007). Following the experts' suggestions, the results from the qualitative analysis were obtained without using software. Researchers who are starting a methodology are recommended not to use a computer to analyze data. Due to the fact that creating conceptual maps using technology have a high degree of difficulty. Instead, they are encouraged to address the analysis 'by hand' (Valles, 2001).

The qualitative results from the content analysis indicated students performed 379 consultations via email and forums with teachers from subjects 'History and Current International Education' (n=121) and 'Research Methods Education' (n=258). Seven categories emerged from the asynchronous communication: *technology* (24.35%), *content* (7.74%), *activities* (22.69%), *timing* (5.62%), *evaluation* (17.73%) *bibliography* (4.28%) and *personal reflection* (24.56%).

The quantitative results from the rating scale evidenced students' perception on their use emails and forums for consultations. The students valued the frequency of their consultations on a scale ranged *always-rarely-never*. The sample considered they *rarely* or *never* use asynchronous communication to consult on: *technology* (74.40%), *content* (54.85%), *activities* (65.54%), *timing* (72.07%), *evaluation* (69.82%), *bibliography* (73.65%) and *personal reflection* (45.46%).

The results of this investigation show a difference between *real* and students' perception of asynchronous communication with the teachers during the course. The affective and metacognitive behavior are present in asynchronous communication. From the study, two recommendations are encouraged in order to improve educational practice: plan a workshop on how to use ICT by faculty members to new students *and* train researchers on specialized software for qualitative analysis. The use of mixed methods research allows Education teachers to understand and consequently, improve their teaching from the students' real needs.

**Keywords:** Mixed methods research, Innovation, university, Educational practice, Blended learning environment, Education, Teaching

## Information extraction for technology opportunity discovery

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**Abstract.** Information extraction from text data, such as academic papers and patents, has been a great research challenge in the areas of knowledge discovery and information analysis.

In this paper, an information extraction model, based on the machine learning technique and graph-data mining technique is proposed. The linguistic features of text are learned from expert-classified training data for technical named entity discovery, and the relations between technical named-entities are discovered from the dependency graph generated by the Stanford dependency parser using the graphed-data mining technique. The purpose of this model is to extract technical information, such as name of technology, purpose of technology, application of technology, name of product and part, relation between products, relations between parts of products, and so on from papers and US patents. This model is originally designed to support our technology opportunity discovery (TOD) service for small and medium enterprises, and we believe this model can be applicable to any general information service based on text data analysis.

**Keywords:** Machine learning, Linguistic feature, Technological information detection, Technology opportunity detection, Natural language processing, US Patent

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## Investigating Reading Preferences of University Students in New York City: A Qualitative Study

*Amanda Foster, Kerri O'Connell, Anna White and M. Cristina Pattuelli*

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**Abstract.** The increasing adoption of smartphones, tablets and e-readers has implications for the way users interact with written information. In order to gain an understanding of student reading patterns and preferences regarding the use of e-books and electronic reading devices (e-readers), particularly in an academic environment, we conducted a two-phase user study of undergraduate and graduate students in New York, NY.

Two focus groups were conducted with a sample of seventeen students at Barnard College. A series of seven semi-structured interviews were conducted with graduate students from Pratt Institute's Graduate School of Information and Library Science. Data collected from the focus groups and interviews were analyzed and triangulated according to Holistic and/or Structural Coding methods in order to identify patterns and common themes (Saldana, 2012).

For most participants, the type of material being read influenced the choice of the medium on which it was read; in general, e-books were preferred for leisure reading and print books for academic reading. Participants indicated that availability of materials for their electronic reading devices also determined what to read and in what format to read it. Time constraints and the physical space where reading occurs also affected participants' reading habits. The convenience of portability, storage, and level of privacy afforded by e-readers were among the most important reasons the participants chose an e-book over a print book.

While the size and homogeneity of the study sample does not allow for the generalization of results, this study offers a preliminary exploration and provides a basis for further studies that would be potentially useful to academic libraries to inform decisions on e-book adoption and use optimization.

**Reference:**

Saldana, J. (2012). *The coding manual for qualitative researchers* (2nd ed.). Los Angeles, CA: Sage.

**Keywords:** E-readers, E-books, Reading practices, Electronic resources, Technology adoption, Academic libraries,, Qualitative research methods

## **LIBER Rankings Project: keeping European research libraries relevant**

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Coordinator of the LIBER Rankings project, France

**Abstract:**

**Background**

The European Commission has decided in 2011 to launch a new multi-faceted ranking tool for universities around Europe, allowing for multiple user-defined criteria: **U-Multirank**. After a feasibility study in 2010-2011, two lead contractors (the Centre for Higher Education Development and the Centre for Higher Education Policy Studies) have been selected by the EC to actually implement U-Multirank during the 2013-2014 biennial.

**LIBER's Rankings project**

LIBER (the Association of European Research Libraries) has commissioned the London-based Research Information Network to help it define a set of key indicators related to research and academic libraries for possible inclusion in U-Multirank. The aim of this **Rankings project** is to provide universities in Europe with the means to measure the added value library services bring to their core missions: research, teaching and learning, knowledge transfer and regional involvement.

**Relevance for academic libraries**

A team of library experts has issued, for EU officials and U-Multirank's contractors a series of options about the feasibility and relevance of including library indicators in U-Multirank. A seminar, to be held in February 2013, is intended to bring experts, both contractors, academic and political stakeholders together to define the role libraries will have in U-Multirank.

This project is of strategic value for academic libraries: figuring among the comparison criteria between European universities and HEIs is essential for libraries as their relevance to their parent institutions' rankings is at stake.

The poster will present in a graphical way the main steps of the LIBER Rankings project: its objectives, its schedule and main achievements to date.

## **Libraries as information resources for teachers**

***P.T. Dadlani***

PhD student, Rutgers University – School of Communication and Information, USA

**Abstract:** This preliminary study involves 2 focus groups comprised of teachers, librarians, administrators and district directors from 2 New Jersey High Schools discussing the role of the library in their respective school environments. The specific focus of analysis is on how teachers use libraries/librarians to meet their information needs with regards to technology. An additional focus is to identify the constraints (first order and second order barriers) on teachers in meeting their information needs with regards to technology (with the library as the information resource). The study takes a grounded theory approach (Corbin & Strauss, 2008) in analyzing and coding the data from the focus group transcripts. It was found that teachers use librarians as a central information resource when it comes to technology. Librarians are seen as enhancing and extending the comfort zones of schoolteachers in using technologies. Libraries are seen as inviting places that bolster self-education and professional development around technology. A wide variety of constraints on the library/librarians being able to provide for the information needs of teachers with regards to technology were identified. A preliminary typology was constructed that could be used to identify further areas of research on the information needs of teachers with regards to technology in school environment.

**Keywords:** Information needs, Information seeking, School libraries, Information technology, Information behavior

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## **Organization of knowledge of learning: a new proposal**

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**Abstract:** The graduate teaching is passing by changes, which lead us to propose a new alternative for the development of dental education. The School of Dentistry, University

of Sao Paulo (FOUSP), attentive to these changes is the pioneer in the implementation of a Resource Center for Learning and Research (CRAI) in the European way. The CRAI is facing for a new pedagogic proposal where the Documentation Service Dental (SDO) acts like the “supplier” of the information and information of dissemination, spread of sources, and do academic support by means of communication and technology.

This is a new model for library idealized by the Network of University Libraries Spanish (REBIUN) whose proposal is to integrate educational services, information and use more appropriate technologies, becoming a dynamic center and social within the university. This model of library has as its center the subject and not the book.

The new methodology was applied to two classes of Dentistry who participated in classes at mould proposed. Although the activities have occurred in a traditional room, the pedagogical content was worked in a participative way. The class was built with the student.

The objective is that at the end of the course are generated works with possibility of publication in the on-line magazine that is being created for this purpose. The publication will be a partnership between student x teacher. The terminology used for the student to be able to identify the area of interest and which professor would be your research partner.

**Keywords:** Organization of Knowledge. Learning and teaching

## **Project management and workflow chart representation of documentation activities. Case study: the documentation repository of labor unions’ experiences for health and safety at work**

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**Abstract:** Any product/service can be seen as the sum of related actions that goes across organizations, activities and dynamics that is called process. Among the representing techniques of processes, used for management purposes in the projects organization, this paper proposes a methodology that uses flow charts, supplemented with Gantt charts and implemented by an experimental method, that allows the preparation of a true project documentation, necessary to mark the choices made during all the time and understand the dynamics that led to the occurrence of conditions. The case study examined, refers to a documentary project to set up a repository for the collection and the usability of documentation produced by the confederate unions on health and safety at work.

## **Quality assessment of services offered by Central Library of Shahid Beheshti University of Medical Sciences by using Libqual model: from users` point of view**

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**Abstract:**

**Background:** The current research aimed at evaluating the service quality of the central library of Shahid Beheshti University of Medical Sciences, Tehran, Iran. It has been done by using Libqual+TM model from view of respondents' minimum, desired, and perceived levels of service quality.

**Methods:** The research type is cross-sectional descriptive and data were gathered using Libqual questionnaire. The Target population includes all the students who are the users of the central library of Shahid Beheshti University of medical sciences. The sample size was 224 determined using Krejcie and Morgan's estimate table.

**Findings:** Users have not been provided with a minimum level of quality even, and there is a considerable gap between desired and perceived levels of provided service quality. Moreover the most dissatisfaction is related to service effectiveness (the human aspect of service quality).

**Conclusion:** There are difference, and gap between users' conception and offered services in all aspects. The mentioned library has not desired function from its users' perspective.

**Keywords:** Service quality, Libqual, Assessment, University library, Shahid Beheshti University of Medical Sciences

## **A sampling of post-secondary integrated information literacy programs in BC**

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<sup>2</sup>Kwantlen Polytechnical University, Province of British Columbia, Canada

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University of the Fraser Valley, Province of British Columbia, Canada

**Abstract:** The goal of our poster *A Sampling of Post-Secondary Integrated Information Literacy Programs in British Columbia* is to gather useful information regarding a few integrated information literacy programs (IILP) at four post-secondary institutions in the province of British Columbia Canada. By showcasing these grassroots programs we hope to stimulate discussions amongst fellow librarians who would like to share their best own practices in academic library instruction of the research process. The poster content will include an up to date history and scope of each university's IL program; partners involved; data on classes/students impacted; and other relevant information. Kwantlen Polytechnic University Library formally implemented integrated information literacy modules into the Public Policy BA Degree curriculum for two courses in 2011. Librarians

teach for one week per semester in the first and third year courses. Okanagan College Library's CILRI Project (Course Integrated Library Research Instruction) piloted in 2009 and accepted in 2010, formalized embedding higher-level IL skills into the curriculum of all first year English courses. Librarians at Okanagan College received the 2011 CTCL Innovation Achievement Award for the development and implementation of CILRI. University of the Fraser Valley Library has been providing a required IL component to several courses for more than 16 years. In 2009 UFV added a new course, Business 100, which serves as the model UFV wants to follow for future collaborations. Vancouver Island University Library began an IILP in 2005 as a component in required English courses. In the newly articulated mandate, the library leads the collaborative development and implementation of literacy standards and objectives for the university's diverse learning community. Refined through subsequent feedback and experience, this initiative focuses on problem-based research and critical skills, and is foundational to anticipated future offerings. We would like to share the evolution of these IILPs, and as well, look to our colleagues for input as we continue to investigate and develop programming in this area of academic librarianship.

## **Scientific production of the University of São Paulo reflecting on teaching and research quality: world rankings**

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<sup>3</sup>Master's Degree student, University of São Paulo School of Communication and Arts, Brazil

**Abstract:** The University of São Paulo (USP) is a public institution maintained and connected to the State Department of Economic Development, Science and Technology. The university is about to complete its 79th anniversary in 2013. According to world rankings, this institution has been highly evaluated, especially in aspects referring to scientific production.

The university has a faculty staff of 5,940 professors, 16,512 workers in various functions, including 320 librarians and technical auxiliaries working in its 44 libraries.

The university's scientific production is the result of research in several fields, which is disseminated in many types of publications, such as books, book chapters, theses, dissertations, journal articles, etc.

The libraries' roles in collecting and indexing the scientific production in the *Dedalus* data banks (online catalog) are of great importance because the majority of papers developed by the faculty, as well as the technical-administrative employees are extracted from these recordings.

The quality of the publications produced by USP assures the relevant positions in world rankings, as can be seen below:

1) Academic Ranking of World Universities (ARWU) developed by the ShanghaiJiaoTongUniversity – 158th position, ahead of other institutions in the United States and abroad, such as the University of Texas, the GeorgeWashingtonUniversity, as well as the University of Vienna (Austria).

2) Webometrics Ranking of Universities (National Research Council of Spain) – 19th position

3) *TimesHigherEducationWorldUniversity* Rankings – from 61st to 70th position.

4) 5,897th position by the Alexa World Ranking and 174th position in Brazil, which measures the accesses to Internet websites, with 24,884 pages containing links to the university's pages.

The library has a highlighted position in this scenario for registering and storing documents which contribute to data collecting as an auxiliary means of data measuring, thus contributing to University of São Paulo's world visibility.

## **Study on the method of characterizing the status of convergence research activities**

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Technology Information Analysis Center, Korea Institute of Science and Technology Information, Korea

**Abstract:** In this study, we suggested a method of characterizing the status of convergence research activities. First, we obtained information about the performance of the research & development projects in Korea by analyzing the database of NTIS(National Science & Technology Information Service of Korea), then we analyzed the trend of convergence research carried out by research institutes of KCRF(Korea Research Council of Fundamental Science & Technology). In order to assess the convergence characteristics, we obtained the Sterling index by calculating the contribution ratio from each field, and the similarity between research fields. Each convergence research project was achieved as a combination of two or more areas of research field(Standard Classification of Science and Technology). We calculated similarities by analyzing citation relations between WoS(Web of Science) Subject Categories and we obtained the contribution ratio through the assessment of experts from each institute. In this study, we were able to find the field of research in which convergence characteristic was demonstrated and cooperation between research institutes was required.

## **Survival analysis of attrition patterns in early career librarians**



## ***Harrison Dekker***

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**Abstract:** Attrition among librarians can occur for a variety of reasons. While it is common for employers to conduct exit interviews to try to determine, in a qualitative way, reasons why an individual has chooses to leave employment, my research explores a different approach to study attrition using a quantitative approach known as survival analysis. Survival analysis is a set of statistical methods used in both physical and life sciences for analyzing the timing of events. This poster will present some early results of ongoing research into patterns of attrition among a large sample of early career librarians. In addition to time, the model takes into account such factors as salary level and the occurrence of merit, promotion, and probation period reviews.

A secondary goal of this poster will be to showcase the analytical and graphical functionality of the R programming language, a powerful open-source data analysis package growing in popularity across a wide range of disciplines. Part of R's appeal is the ease with which the language can be extended and shared, allowing users to learn and apply new methodology. Given that R is a free tool, the emergence of a community of R users interested in quantitative library methods could help accelerate the pace of adoption in a wide range of libraries.

## **Understanding e-book adoption as the diffusion of innovation**

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**Abstract:** While much literature has discussed factors influencing the introduction and adoption of e-books into academic library settings (Lopatovska et al, 2013; Revelle, Messner, Shrimplin, & Hurst, 2012; Joint Information Systems Committee, 2009), studies have not addressed e-book adoption and use among populations that do not have institutional access to e-book materials. A study was conducted in the fall of 2012 at a small undergraduate- and graduate degree granting institution that does not currently offer e-books through its library to determine how students studying Library and Information Science (LIS) at this institution use e-books for academic purposes. To collect quantitative data on e-book use among this population, a survey was sent out via the library and information science school's listserv, while qualitative data was gathered in focus groups and through individual interviews. The results of this study show that, despite not having access to e-books through their institution's library, LIS students actively circumnavigate barriers of access to use e-books for their coursework and research.

This study becomes a useful case study for technology adoption when framed with the concept of innovation diffusion (Rogers, 1995). In this case, the use of e-books for academic purposes is understood as an innovation that many LIS students do regularly but is not currently supported by their institution. Participants' discussions of the reasons that they use e-books demonstrate Rogers' conceptualization of innovation evaluation--or how users assess the expected consequences of a new idea--as well as the characteristics of an innovation that lead a population to adopt it more readily: relative advantage, compatibility, complexity, trialability, and observability. This poster will use these

components of innovation diffusion to visualize how e-books have been adopted in an environment that does not yet have majority adoption of them.

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## The use and the value of electronic scientific information in Portuguese academic libraries

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<sup>2</sup>CIDEHUS- Universidade de Évora / Universidade do Porto – Faculdade de Ciências, Porto, Portugal

**Abstract:** Nowadays the Portuguese electronic scientific information consortium (*b-on – Biblioteca do Conhecimento Online*) provides unlimited access to hospitals, research and academic institutions to the full texts of more than 16,750 scientific publications, via the internet, at a national level. This digital library was first planned in 1999. The *OCT – Observatório das Ciências e Tecnologias* – carried out an exhaustive survey of scientific journals signatures from all the Portuguese institutions to prepare for negotiations with publishers. In 2000, this digital library started giving access to an important and well known tool Web of Knowledge. This tool allowed access to titles, abstracts and citations of information and impacts of some 8,500 scientific journals, including records since 1945. Since 2004, the b-on service has made available the full texts of more than 18.000 ejournals, 23.800 ebooks and 13.600 proceedings

In this investigation it is assumed that the scientific and technological information provided by *b-on - Biblioteca do Conhecimento Online* is a good, thus it is possible to value this good in monetary terms based on the user's perspective. This poster shows the use, the costs of electronic scientific information resources available in the universities and some relations between the use, the costs of the *Biblioteca do Conhecimento Online* (b-on) and the information value in monetary terms on the user's perspective based on contingent valuation methodology from several portuguese universities.

This study also shows some data and results from University of Porto and highlights some results that are very important to support the decision processes.

## Using mobile devices for medical information: a health sciences library perspective

*Arpita Bose*

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**Abstract:** The Health Sciences Library at a large teaching hospital in the New York City area has become involved with the mobile medical research needs of physicians, residents, students, and staff. Many hospital affiliates use mobile devices such as tablets and smart phones. In addition, since 2011 the hospital has distributed Apple iPad™ devices to incoming medical residents so that they can access the Electronic Medical Record (EMR). To support these residents as well as other hospital affiliates who use mobile devices, the Library has acquired an iPad. We have tested our licensed electronic resources (e-books, e-journals, and databases) on the mobile platform, and we communicate with vendors about optimizing their products for mobile devices. We surveyed library users for their current usage and future needs for mobile medical research. We investigated the best, freely available mobile applications (“apps”) that would benefit our users. We also created a Mobile Medical Apps web page on the Library’s web site. This page links to high quality medical information apps that are compatible with both the Apple iOS and Google Android platforms. We plan to offer workshops on how to use the iPad in the clinical setting to research patient care. Other medical libraries can take these steps to serve their users who use mobile devices.

## Using social media to overcome financial constraints in libraries perspectives from developing countries

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**Abstract:** In the Developing world, libraries as a group share their resources with each other. The main purpose of this is to overcome financial constraints. The library groups who share their resources and services are called library consortiums. In 2008, Bhatt & Vineeta described that library consortia mean group of libraries working together for a common cause. It means collaborative or coalition effort for meeting the varied needs of users. Further they stated it as any kind of formal cooperative arrangement where people agree to exchange information or resources. They clearly pointed out that library consortia mainly deal with resource sharing in digital/electronic format. Library consortiums have become a strategic solution to overcome financial barriers in developing countries. Libraries are encouraged to join a library consortium in developing countries as it is important to keep some type of collaboration among libraries to share their resources for reduction of cost.

Blogs and knowledge portals are also considered very useful tool of providing current information to library users. It immensely benefits to overcome financial crisis among libraries by way of providing SDI, CAS, table of contents of journals and other useful technical documents. In 2005, Schwartz stated blog is a kind of online diary which

contains newsgroups such as articles, latest information etc placed in a reversed chronological order. Further Schwartz described that blogs were a user-friendly form of web publishing and many varieties came into being. Blogs help to librarians to communicate with their users effectively. The author of this paper created blog on strategic studies (<http://kamani-strategicstudies.blogspot.com/>) and Knowledge Portal on South Asian Strategic Studies and International Relations (<http://rcss.asia/>) to cater the library community in South Asia region and beyond. The blog covers the following subject fields and regular updates are made on.

- Regional (South Asia) and nuclear security
- Role of military and nuclear technology
- Doctrines, Arms Control and Disarmament
- Emerging security concepts
- Non-traditional security issues
- Terrorism
- Human Security issues
- Governance
- Gender security and migration
- Role of Digital Technology in International Relations

One of the other ways of facing the financial crisis is taking initiation to extend the library services through open access. It helps to distribute available resources freely. This facilitates a greater benefit to the developing country sector where scholarly community couldn't access needy information due to financial constraints. Open access reduces costs of material acquisitions and administration.

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## Web resource clustering based on social tag information: a pilot study

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**Abstract:** This study suggests a new method for clustering web resources by their characteristics based on social tag information. As social tags contain keywords for describing resources on the web, we assume that tags can serve as an aid to classifying web resources. In this study, we examined whether social tags could be useful to classify websites in a certain domain. Using three statistical methods, including principal component analysis (PCA), multidimensional scaling (MDS) and hierarchical clustering analysis, we tried to classify websites in the domain of consumer health information. As a dataset, we selected 38 representative consumer health information websites suggested by CAPHIS (Consumer and Patient Health Information Section), and then collected social tags of those sites from Delicious.com using a tag crawler (delicious.py). The collected data were trimmed by excluding both extremely general terms and specific terms. First, the PCA method was applied to identify different dimensions of the selected

websites. Five dimensions were extracted from PCA, such as kids & parenting, seniors' health, women's health, and drug information. Second, MDS mapping was used to specify the relationship between the selected websites by projecting the websites on the two-dimensional space. We observed that sites with similar characteristics were in adjacent locations on the map. Third, we conducted a hierarchical clustering analysis to group similar websites in different hierarchical levels. These three different methods revealed that social tags can be used to represent important characteristics of individual websites in the domain of consumer health information. This study implies that social tags can be used to automatically classify resources on the Web based on previously provided user input.

**Keywords:** Social tag, Clustering, Consumer health information

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