# Book of Abstracts

6<sup>th</sup> Qualitative and Quantitative Methods in Libraries

# **QQML 2014**

# **International Conference**



**Editor** 

Anthi Katsirikou

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#### **Preface**

It is our pleasure to welcome you in Istanbul, Turkey to the 6<sup>th</sup> Qualitative and Quantitative Methods in Libraries International Conference (QQML2014) 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 sixth 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 on 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 59 countries: Albania, Algeria, Australia, Austria, Belgium, Brazil, British Columbia, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Egypt, Estonia, Finland, France, Germany, Ghana, Greece, Hungary, India, Indonesia, Iran, Israel, Italy, Japan,

Korea, Lithuania, Malaysia, Mexico, Netherlands, New Zealand, Nigeria, Norway, P. R. China, Pakistan, Poland, Portugal, Qatar, Republic of China, Taiwan, Romania, Serbia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Southern Africa, Spain, Sultanate of Oman, Sweden, Taiwan, Thailand, Turkey, <u>Uganda, UK, United Arab</u> Emirates, USA and Zimbabwe.

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Sincere thanks must be recorded to colleagues, friends and partners who worked hard for the conference success and especially the conference committees, speakers and keynote speakers, authors and reviewers. Finally, we would like to heartedly thank Christos Skiadas, Aggeliki Oikonomou, Iro Tzorbatzaki, Aris Meletiou, Eleni Molfesi for their valuable cooperation.

Athens, May 2014

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### Plenary speakers

# Defining 21st Century Research Libraries to Implementing 21st Century Research Universities

Anne R. Kenney

Cornell University, USA

In this keynote, Cornell University Librarian Anne R. Kenney argues that research libraries should focus less on measuring what they are doing and more on developing metrics that measure how well they are enabling research universities to thrive in the 21st century. This requires a paradigm shift away from the work of librarians to that of scholars and students and the development of engagement strategies based on their needs and success indicators. Among strategies she suggests are to concentrate on performance measures that are motivating the academy and to partner with those on campus who collect and assess such data. Based on this information, the library should develop strategies to intervene at points of pain and need that are inhibiting faculty and student performance, adopt automated tools and templates to scale labor intensive efforts, and to quantify goals and progress towards success that impact the university such as recruiting faculty and students, competing for external funding, and enabling new forms of research, scholarship, and creative expression. The library in the future must be prepared to answer two key questions: what does it do that promotes academic productivity and is it the most effective and efficient way to achieve that end? To succeed the library must demonstrate that it is more than a purveyor of content but an essential component of the academic knowledge infrastructure on and off campus.

### Riding the Waves or Caught in the Tide – The IFLA Trend Report

Lynne M. Rudasill

University of Illinois at Urbana-Champaign, USA

The IFLA Trend Report was published in August of 2013 to provide library and information professionals with a view of the possible futures for the information society. Experts from many parts of the Information Society were called together to explore societal and technological changes that might be driving society in the distant and not-so-distant future. These individuals, coming from a variety of commercial, governmental and organizational backgrounds, provided IFLA with a broader view of the global information environment. The trends identified included new technologies, online education, privacy and data protection, hyper-connected societies and the transformation of the global information environment. Some of the trends will be familiar to all of us, and some not as apparent. But the Trend Report was not meant to be a static document. In addition to exploring the trends highlighted in this report, and other related reports, we

will discover the ways in which the report can be used to advance consideration of the future of libraries and the ways in which we can enrich this report with our own experiences and knowledge.

### **Topics of QQML Research**

### Nikolaj Lazić, Jadranka Lasić Lazić, Mihaela Banek Zorica

University of Zagreb, Croatia

**Abstract:** The paper gives an overview of topics that have been highlighted at the previous five QQML conferences. Based on the classification of conference papers, we will show how much interest there was in particular topics, the institutions that authors came from, etc. We will also give a historiograph presentation of how specific research topics appeared through time. We will use statistical indicators relating to the number and type of conference papers, topics, keywords and co-authorship, to show and analyse productivity in the field of information sciences taken as a whole. In this context, we will particularly analyse institutions and countries that authors came from. Finally, we will especially single out those indicators that expressly show the conference's impact over this five-year period. The aim of the paper is to show the significance of conferences in the development of the fields.

Keywords: Bibliometrics, Information sciences

### Workshops

# The Fact-based Management and Decision-making of Libraries

### **Jarmo Saarti** University of Eastern Finland Library, Finland and **Markku Laitinen**

National Library of Finland, Finland

Workshop outline: The need for high-quality facts for evidence based management of change is of high importance for the restructuring of the library and information organizations. The workshop and special session will concentrate on the role of facts gathered from the library statistics and user surveys as a supporting tool for the decision-making. In the presentations, various cases and perspectives introduce to these themes. The session continues with a workshop, in which the goal is to share ideas and good practices concerning data use to the managerial purposes.

Target group: Library managers and other decision-makers or planners.

### How Do We Create a Basis for Decisions? - An E-resource Evaluation Method Project at Uppsala University Library, Sweden

#### Karin Byström

Uppsala University Library, Team leader, e-resources team and **Satu Qvarnström** 

Uppsala University Library, Librarian, Coordinator of user education Workshop outline: The purpose of this workshop is to share and discuss experiences from making renewal decisions for e-resources. An adaptive evaluation method that makes it possible for libraries to combine quantitative usage statistics with qualitative aspects will also be presented.

Participants in this workshop will get the opportunity to discuss how they work with quantitative and qualitative methods in evaluation of e-resources and what is important to take into consideration. Together we can come up with new ideas and share our best practices on how to work systematically with evaluation methods as a basis for renewal or cancellation decisions.

In the spring of 2013 Uppsala University Library appointed a working group with the aim to find a combined qualitative and quantitative method for evaluation of the library's e-resources at renewal. Criteria were that the evaluation method be implementable with a reasonable effort, at low cost and be easily integrated into an existing workflow. Uppsala university library decided on a method which is based on the use of a matrix where various aspects of the e-resources are ranked: access, cost/benefit, width/target and unique character. It also involves faculty collaboration. We will share our experiences from the project so far; difficulties we have come across and solutions that we have come up with.

Keywords: Evaluation methods, Assessment, E-resources, Qualitative methods, Quantitative methods, Collaboration, Evaluation criteria

#### **Abstracts**

# Academic Libraries, Interstitial Organizations, and the Network Society

Paul J. Bracke

Purdue University, USA

Abstract: Libraries are finding themselves struggling to understand the ways in which they fit into the global knowledge environment and the social, cultural and economic structures of the Network Society. Castells (1996) argues that the network society is characterized by fundamental changes in global social, cultural, and economic structures based around the spread of digital communications networks. In this context, higher education has developed evolving relationships with private and government sectors, characterized by an emphasis on innovation, changing modes of faculty work and collaboration, and changing institutional priorities and structures (Leydesdorff and Etzkowitz 1996 and 1998, Slaughter and Rhoades 2004). In this environment, interstitial organizations mediate Academic-Industrial-Governmental relationships, facilitating resource flows between universities and private sector and facilitating knowledge, financial, and prestige exchange. Libraries are increasingly engaged in entrepreneurial activities and with the market, connecting both to companies and for consumer attention. Although interstitial organizations are often discussed as a means to commercialization of higher education, they can also be seen as a means for libraries to develop a role in a web-scale information environment by aggregating resources, facilitating relationships, and allowing for the creation of services that capture the attention of information consumers. Through two case studies (HathiTrust and DataCite), I will argue that libraries are engaging with the structures of the network society through the formation of interstitial organizations that allow them to connect to the market-oriented global knowledge environment.

**Keywords:** Change of Libraries, Financial Strength and Stability, Information and Knowledge Service, Library Change and Technology

# AD<sup>2</sup> M<sup>3</sup>: Administrative Documents Description and Manipulation Metadata Model

Nikolaos M. Tsatsakis, Mihail E. Panagiotakis

Central Administration – Information Technology Department, Technological Educational Institute of Crete, Greece

**Abstract:** Optimized administrative documents' manipulation is a key issue in exercising efficient, good and reliable management/administration. At the same time, granting open access to all those documents to which is legitimate to do so is a one way road to transparency for every administrative act.

Towards this aim, and within the framework of the action "Organization, highlighting and promotion of the academic content of the TEI of Crete" under the operational program "Digital convolution", a digitization process of certain parts of the past archives of administrative documents is underway, along with the organization of the digitized documents to an appropriate system. The organization process is based on the annotation of the digitized documents with metadata, and will also be applied to all existing and forthcoming digital administrative documents.

Initially, a document management (DM) or an enterprise content management (ECM) system was considered to be used in the organization process, as such systems also provide functionality for the manipulation and routing of administrative documents. However as available DM and ECM systems do not incorporate mechanisms to handle metadata models effectively, not even standard simple sets of metadata terms, the optimization in the description of their content and the open access support would be incompatible with the choice of such a system for the organization of the documents.

Alongside, the success story related to the use of an institutional repository (IR) from the library in the Technological Educational Institute (TEI) of Crete as a platform to collect, organize and preserve the diploma theses of the students, while promoting the automated creation of collections and meta-collections of theses by use of a certain metadata model (TCDMeta), contributed to deciding in the usage of an IR as the deposit platform for the administrative documents and their descriptions.

Even though IRs do not offer functionality related to the manipulation of documents in terms of administrative acts or routing decisions, such information was decided to be stored in terms of appropriate metadata by extending the model designed for the documents' description to one which also comprises their manipulation. For these new metadata terms, which constitute the set of "manipulation metadata", a process to automatically create them is examined.

**Keywords:** Administrative documents, Metadata model, DM – ECM systems, Institutional Repository, TCDMeta, Manipulation metadata

# Affected by Strategic Planning Managers in Improving Performance of Library Employees in Iran University of Medical Sciences

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<sup>&</sup>lt;sup>3</sup>MSc in Engineering Geology, Science and Research Branch, Islamic Azad University, Tehran, Iran

#### Abstract:

**Aim:** The aim of this study is the Affected by Strategic planning Managers in improving performance of library employees in Iran University of Medical Sciences.

**Material & Methods:** The population is the library managers of Iran medical university which are about 50 persons that just 44 of them answer the questionnaire. For analyzing the data was used from descriptive & analytical statistics indicators (Abundance, Average, Mean, Percentage, chart, yield Standards) and analytical statistics for answering the questions & hypotheses of this paper was used spearman nonparametric test.

**Result:** It is found out that strategic planning has significant relevance with job satisfaction, organizational commitment, conscientious work, motivation and efficiency (P=0.000) but it doesn't have any significance with communication skills.

**Conclusion:** The results show that there is a relationship between managers strategic planning and the main Components of questionnaire and all of these topics especially motivation among staff should be considered by managers of library. So that staffs are more satisfied, undertaking, conscientious and motivated.

Keyword: Strategic Planning, Managers Library, Employers Library

# Allocation via Departments and Programs: An Analysis and Assessment of Library Resource Distribution

#### Jo Flanders

Learning Resource Services at Miller Center Library, St. Cloud State University, St. Cloud, Minnesota USA

**Abstract:** Every year libraries are faced with the financial challenges of acquiring and providing access to resources that best support their university's users and its programs. In an effort to assure its resources were being allocated effectively, the library at St. Cloud State University developed a method for review and assessment of library resources that involved sorting resources into subject areas related to the University's programs and departments. Subscription information on databases, print and electronic journals, standing orders, reference collections, and eBooks was compiled and recorded in spreadsheets and shared with the campus community. Feedback was then used to make decisions on what to acquire, renew, or cancel in order to assure the library was spending allocation dollars to best support its learners and the online community.

In this session the presenter will share information on the success of this project, and will share documentation used with departments and programs for review and assessment of library resources by subject area; allowing for a more complete analysis of the collection's strengths and weaknesses, and providing faculty and user involvement in the decision making process of what to acquire or cancel.

### The Analysis and Research for the Evaluation Index of The Natural Science Foundation of China

Yunman Fan, Jianxia Ma, Jing Liu

Lanzhou Branch of the National Science Library, CAS, P. R. China

**Abstract:** The paper proposes one set of indices for the foundation supported by the Natural Science Foundation of China (NSFC), and analysis the foundation in terms of the number of funded projects, the amount of subsidy, the paper output from the projects and the amount per project, paper output per project, the amount per paper etc. project, this paper establishes a visual analysis system for the projects funded by the NSFC to turn out a time sequence diagram for each index and analysis the trend of the index. According to the indices we proposed, we analyzed the output of NSFC projects in oceanography.

Keywords: The Natural Science Foundation of China, NSFC, Index system, H-index, G-index

# An Analysis of Library's Intellectual Capital Resources: Managing Co-operative Dynamics in Library Networks

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#### Abstract:

**Purpose:** The main aim of this paper is to explore methods for identifying and managing library's intellectual capital resources. Furthermore, this paper focuses on the examination and the analysis of the phenomenon of libraries? co-opetition in the light of intellectual capital theoretical perspectives.

**Design/methodology/approach:** Library's intellectual capital assets/resources are approached through known identification methods, and a distinction between resources and assets is taking place. A categorization of the intellectual capital resources/assets is provided and the relevant literature is reviewed. Moreover, theoretical and practical issues of different library network competition and cooperation (co-opetition) situations are analyzed. The significant role of non tangible assets is identified when studying relationships among libraries as well as among libraries and other organizations.

**Findings:** A framework is proposed for understanding the combinations of strong, moderate and weak scenarios of library cooperation and competition in support of intellectual capital assets/resources.

**Originality/value:** The results from this research are conceptually linked to individual library performance, to the formation of libraries' networks and to the maintenance of those that already exist. The intellectual capital resources can be further examined and analyzed on the basis of their effect on value creation for different types of libraries.

**Keywords:** Intellectual capital, Library management, Human capital, Organizational capital, Relational capital, Cooperation, Competition, Co-ompetition

## Analysis of the Questionnaire Results to Professionals of Portuguese Public Libraries on the Social Role of the Public Library on Facebook

Luísa Alvim, José António Calixto

CIDEHUS, Universidade de Évora, Portugal

Abstract: This work presents the results and the analysis of the questionnaire conducted among 118 professionals of Portuguese public libraries with page/Facebook profile at the beginning of the year 2014. It is part of a wider research - case study, using other techniques for data collection on the impact of Web 2.0 on the social role of Portuguese public libraries on the Facebook platform. The main purposes of the survey are to analyze how professionals from libraries explore the Facebook platform regarding the social mission, as well as collecting and analyzing their opinions/perceptions about the social mission of the public library and how Facebook contributes to develop it. The questionnaire was structured in six thematic sections: 1. Identification of the respondent 2. Characterization of the human resources of the library; 3.Use of Web 2.0 technologies by the library 4. Use of the library Facebook page 5. Opinion about the presence of the Public Library on Facebook 6. Opinion about the social mission of the public library on Facebook. The questions are closed type with multiple choice and with evaluation table. Open questions were used in order to better assess the respondents' opinion. This designed in the online system questionnaire was eSurvey (https://www.esurveycreator.com/). The analysis of the results was provided by the online system and the open questions were worked on a qualitative analysis software WebQDA (www.webqda.com).

**Keywords:** Questionnaire, Qualitative methods, Portuguese public libraries, Social role of the public library, Facebook

# Application of Bibliometrics in Public Libraries *Iskra Arsenova*

State University of Library Studies and Information Technologies, Sofia, Bulgaria

**Abstract:** The **purpose** of this paper is to describe the potential consequences of bibliometrics as an emergent field for public libraries. Results are reported from a survey distributed among public libraries in Bulgaria with organized bibliometrics activities. There is a constant need to adapt to the ongoing changes and new demands of today's information society, and the increasing importance of bibliometrics certainly presents a great opportunity for librarians to broaden their professional development.

**Design/methodology/approach** – The idea is that bibliometrics methods could be widely used in public libraries for analysis of literature and information needs. Bibliometrics has been found to be very useful in solving diverse issues. However, its application in public libraries is not very common in Bulgaria and this area of research needs more attention. The focus of the paper is set on a detailed description of the possibilities of the bibliometrics and to recommend measures to improve library activities by using bibliometrics methods.

**Findings** – To promote bibliometrics in a reasonable way belongs also to the tasks of heads and staff of public libraries. The promotion must begin with the popularization of the contents and teaching of basic knowledge. That means that the conveyance of knowledge, abilities and skills concerning bibliometrics has to be admitted to the educational plans and it will become an immanent constituent of library science. Bibliometrics with its various methods will contribute to organize library activities better and to make it more effective.

**Practical implications** – The case study can be useful for public libraries who wish to become more engaged in this field or even plan to implement according services. It recommends enhancing the application of bibliometrics in public library activities.

**Originality/value** – This is an original paper, which provides useful information on how a public library can adopt bibliometrics as a core role.

Keywords: Bibliometrics, Quantitative methods, Public library, Information needs

# The Application of Human Resource Management in the Digital Library Programmes

Aira Lepik, Tallinn University

Abstract: Human resource management (HRM) is a strategic, integrated and coherent approach to the employment, development and well-being of the people working in organizations. The overall purpose of HRM is to ensure that the organization is able to achieve success through people. 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. In the contemporary organization, human resources - the people within an organization - are one of the primary means of creating a competitive advantage for the organization, because management of human resources affects performance. Digital Library Programmes are nowadays integrated in many library and information science (LIS) schools curricula. Recently there has been a growing interest in digital library education in almost all parts of the World. Preparing students for work in the digital environment requires set of knowledge and skills where management, particularly human resources management, is needed. Surveys of digital library education have been conducted and results analysed but there is not contemporary research focused on HRM issues in the Digital Library Programmes. The author will use her own experiences of developing the HRM module for Erasmus Mundus International Master program in Digital Library Learning students. The HRM module is designed to develop knowledge on HRM theories, practices, tools and models and to provide students analytical framework needed to understand strategic HRM approach in digital libraries. With successful completion of this module students will have depth and systematic knowledge of the nature and value, current practice and research on library HRM in the digital environment, understanding on concepts of HRM and their applications in digital environment, they will be aware of the range of issues and international trends of library HRM in digital environment. This module consists of seven 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. This paper discusses and summarises the application of HRM in the Digital Library Programmes. The main purpose of the paper is to analyse aims, objectives, scope and learning outcomes of the topics of the HRM modules in the Digital Library Programmes, as well compare different HRM theories and models used and framework associated to understand HRM issues within the digital library.

Keywords: Human Resources Management, Erasmus Mundus International Master Program Digital Library Learning, Digital Library, Curriculum

# Application of Web2.0 Tools in Iranian University Library Websites

Narges Khaleghi, Najmeh Bagherian

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**Abstract:** The aim of this paper is to determine the use of web 2.0 tools in library websites in Iranian universities. The research method is survey-based and the data is collected through checklist. The study population includes central library websites from 55 Iranian public universities and 122 central library websites of Iranian Medical Science universities. The web 2.0 tools used in this research are RSS, Wiki, blog, podcast, vodcast, and IM. The results encourage librarians and university website designers to increase the use of web 2.0 tools in order to provide traditional services the form of new technologies and developing services to users.

Keywords: University library websites, Web2.0, Iran

# Applying the Servqual Scale to Assess Library Quality: An Empirical Analysis of Latin American Papers Appearing in the CAPES Periodicals Portal

Barbara S. Domingues<sup>1</sup>, Frederico A. de Carvalho<sup>2</sup>, Valdecy F. Leite<sup>3</sup>, Mariza Russo<sup>4</sup> and Maria J. V. da Costa Santos<sup>5</sup>

<sup>1, 2, 4, 5</sup>CBG – FACC – UFRJ, Brazil <sup>3</sup>UFRJ, Brazil

**Abstract:** For some time now service evaluation has become a mostly used managerial tool for obtaining knowledge about how library services are been provided by information units. Therefore service quality has been growing as an important theme in academic publishing and scientific articles on Library and Information Science. A recurrent topic in service quality assessment is provided by the Servqual model and its measurement facet, namely the Servqual scale. In practical applications the scale starts from a list of attributes deemed to describe and define service characteristics and proceeds to interview customers – either current or potential – on the basis of their expectations and perceptions about previously selected service attributes.

The research reported here intends to analyze the occurrence of Servqual applications appearing in selected Brazilian and South American papers dealing with library services. A grille d'analyse - that is, a customized spreadsheet containing demographic data on the papers, as well as the main elements required to be present in a typical application - has been developed following Leite (1996) and Parasuraman, Zeithaml and Berry (1991, 1994). Selected papers were collected from the CAPES (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior) periodicals portal, a well known Brazilian bibliographical database. Occurrence of the scale has been examined via simple counting and frequency analysis of the demographic attributes or of the elements appearing as columns in the spreadsheet, whereas selected papers appear as rows.

Even though the collection spreadsheet was simple to fill in and of a quite general applicability, to our surprise only seven papers were finally selected, six from Brazil and one from another country in South America. Surprisingly none of the papers uses the 1994 version of the scale, although all have been published since 2000. Findings suggest that in general the scale is only partially understood - so that applications seem to remain quite incomplete - and that they lack managerial content, against the well claimed raison d'être for Servqual. The main recommendation points to a mostly needed dialogue among librarians and service management experts to establish an effective interdisciplinary learning environment where relevant – hence applicable – knowledge about service evaluation is generated and shared.

Keywords: Library services, Service quality, Service evaluation, Servqual

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Zeithaml, V. A.; Berry, L. L. (1994) Alternative scales for measuring service quality: a comparative assessment based on psychometric and diagnostic criteria. Journal of Retailing, v. 70, n. 3, p. 201-230.

# An Assessment of Selection and Acquisition of Information Resources in Musa Abdullahi Central Library, Hassan Usman Katsina Polytechnic, Katsina

#### Bello Sani Manzo

Musa Abdullahi Central Library, Hassan Usman Katsina Polytechnic, Katsina State, Nigeria

**Abstract:** The study examines selection and acquisition process in Musa Abdullahi Library Hassan Usman Katsina Polytechnic. Its major objectives are to find out how selection and acquisition of information resources are done in the library. Survey method was employed in the study. Questionnaire and interview were used to collect data. Collection development librarian of the library was interviewed while users of the library were given questionnaire to ascertain if the collections are meeting their information needs. The findings of the study identify lack of selection and acquisition policy, selection committee, inadequate funding, among others. The study was concluded and recommendations were proffered based on findings of the study.

Keywords: Selection, Acquisition, Information resources, Library patrons

# An Assessment of the Institutional Repository at an Academic Library in Malaysia: A Single Institution Case Study

Prof. Dr Ahmad Bakeri Abu Bakar, and Nur Leyni P. N J.

Department of Library and Information Science, International Islamic University, Malaysia

**Abstract:** One of the major obstacles faced by scholars and researchers in developing countries is their lack of access to the important literature in their field. In most developing countries budgets for library collection development are small and as a result teaching and research in these countries is being conducted without the essential research materials available internationally. One of the strategies adopted by the open access community to address this problem is the provision in ensuring the free availability of scholarly literature on the Internet, permitting any users to read, download, copy and print the full texts of articles.

One of the outcomes from this strategy is the development of the institutional repository (IR) which promises to be extremely advantages to scholars and researchers in the developing countries. Towards this end a repository system was established in July 2011 by the library at the International Islamic University Malaysia, Malaysia. IR involves change in the way research is disseminated, preserved, and published. This change

requires faculty to deposit their research materials in the repository — a new step in the research process. The digital collections encompassing only journal articles, chapter of a book, book and conference papers in various subjects and disciplines. Since its establishment no research effort was conducted to measure the success of the IR.

The purpose of this study is to assess how successful is IR to the university community based on input activities and use. What factors affect input activity and what other factors affect the use of an institutional repository? For the purpose of this study success is being defined as use. Data collected for this study will be from July 2011 until October 2013. The findings from this study would be useful to managers of other institutional repositories in Malaysia as well as others in the developing countries. It could also be useful to research funders who are becoming increasingly interested in monitoring what is produced as a result of their funding and in analysing research performance.

# Assessment of the Relationship between Corporate Transparency and Librarians' Career Success, Case study: Central Libraries' of the Public Universities a Affiliated to the Ministry of Science, Research and Technology in Tehran

Fatemeh Nooshinfard<sup>1</sup>, Ph.D, Maryam Emamverdi<sup>2</sup>

#### Abstract:

**Objective**: This study aimed to assess the relationship between corporate transparency and career success of Central Libraries' librarians working in public universities affiliated to the Ministry of Science, Research and Technology in Tehran.

**Method**: The research methodology was analytical survey and data collection instrument was a questionnaire. The research population was the librarians with minimum qualification of diploma worked in different parts of the central public universities affiliated to the Ministry of Science, Research and Technology in Tehran in 2013 with a total of 219 (122 females and 54 males ). Finally, 176 questionnaires were collected and statistical analysis was performed using spss software.

**Findings**: The results of this study showed that the level of corporate transparency in Central Libraries of public universities affiliated to the Ministry of Science, Research and Technology in Tehran was lower than average and the career success rate of them was more than moderate. Meanwhile, the results showed a positive correlation between organizational transparency and professional success. There was a parallel increase corporate transparency and career success.

**Keywords**: Organizational transparency, Professional success, Librarian, Public universities affiliated to the Ministry of Science, Research and Technology, Academic libraries

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### Assessment of the Relationship between Workplace Spirituality and Organizational Excellence at the National Library and Archives Organization of the Islamic Republic of Iran

# Fatemeh Nooshinfard<sup>1</sup>, Ph.D, Azita Kodabakhsh<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, Science and Research Branch, Islamic Azad University, Tehran, Iran

#### Abstract:

**Purpose:** The main purpose of this study was to assess the relationship between spirituality in the workplace and organizational excellence at the National Library and Archives Organization of Islamic Republic of Iran.

**Methodology:** The research method used in this study was analytical survey. Data gathering was done by using questionnaire instrument. Research population was 700 including managers and employees of National Library of Iran. Sample population was 260.

**Findings:** Results indicate that in general, spirituality in the National Library and Archives of the Islamic Republic of Iran has an average of 69.27 the minimum score was (32) and the maximum score was (86). Also n the spirituality of working at the personal level was 22.5. The minimum score was (6) and the maximum score was (30). The working spirituality at the group level was 24.04 from the minimum of 15 and maximum of 30. At the organizational level, the spirituality mean was 22.72, the minimum score was 11 and the maximum score was 31. The finding shows the relatively high level of spirituality in the workplace and it can be concluded that the employees of the organization are in a good condition regarding the spiritual affairs. The findings indicate a greater level of spirituality at the group level than the personal and organizational level. Organizational Excellence average was 217.03 at the National Library of Islamic Republic of Iran comparing with a minimum score of 144 and a maximum score of 289. **Results:** The finding showed a meaningful relationship between spirituality in the workplace and the organizational excellence.

**Keywords:** Spirituality in the Workplace, Organizational Excellence, National Library and Archives Organization of Islamic Republic of Iran

# Attaining Employability Skills by Focusing on Information Competencies: How Far Are We?

Sonja Špiranec, Đilda Pečarić and Tomislav Ivanjko

University of Zagreb, Faculty of Humanities and Social Sciences, Department of Information and Communication Sciences, Croatia

Abstract: In the employment context, employers give more and more priority to candidates with generic competencies. Numerous studies suggest that information

competencies have an important role in generic competencies. However, studies performed in Croatia indicate unsystematic and sporadic presence of information competencies in curricula. The aim of this paper is to analyze the information competencies in graduate study programs at the University of Zagreb. In order to cover the largest number of enrolled students, as the sample for analysis 20% of graduate programs with the largest number of enrolled students were selected from each scientific field (biomedicine, biotechnology, engineering, humanities, natural sciences and social sciences) with the exception of arts study program. These top 20% of graduate programs enroll a total of 41% of the students' quota for the entire University of Zagreb. A total of 27 master study programs were analyzed with a total of 2735 courses. The research results provide a presentation of the current situation and recommendations for the optimization of information competencies in the graduate curriculum at the university level

**Keywords:** Information literacy, Generic competencies, University of Zagreb, Information competencies

# Automated Thesaurus Population and Management E. Petraki, C. Kapetis, E. J. Yannakoudakis

Athens University of Economics and Business Department of Informatics, Greece

Abstract: FDB is a set theoretical model which allows the definition of any multilingual database and thesaurus. The purpose of this paper is to investigate the issue of automatic thesaurus enrichment in general and especially in FDB model as well as the automatic correlation between data records and thesaurus terms in the FDB model. FDB is an integrated model for database systems. It provides a universal schema which allows the definition of any database by simply specifying the appropriate metadata and offers many utilities like the administration of multilingual databases both at data and interface level, definition of variable length objects etc. FDB also incorporates the ability of the administration of one or more multilingual thesauri. The thesaurus forms part of the FDB model; more than one thesaurus can be defined in FDB which can be multilingual or monolingual while the linking of each frame object (data record in terms of a traditional database) with the appropriate thesaurus terms can be achieved easily. In this paper we firstly present briefly the FDB model, and proceed to present a) the algorithms which implement the linking of each frame object with the underlying thesaurus terms automatically, b) define algorithms for automatic thesaurus enrichment with terms derived from the data base and c) outline research concepts and related work about the automatic thesaurus creation.

**Keywords:** Databases, Multilingual thesaurus, Information retrieval, Conceptual retrieval, FDB

# BibPad as a Library Service or Crowdsourcing a Library Search Engine

# Sebastian Mader, Christoph Wieser, François Bry, and Clemens Schefels

Institute for Informatics, Ludwig-Maximilian University of Munich, Germany

**Abstract:** Annotating is an important part when working with literature, especially in science. Up to now, a person's annotations are private or only shared with a small group of other persons who are granted access to the notes or the annotated media. A proof of concept prototype called BibPad has been realized that allows users to create, share, and collaborate on annotations. These annotations contain information about the annotated media that go far beyond usual meta data and can be used to build a library search engine through crowdsourcing. Crowdsourcing a library search engine is in fact the reason why BibPad has been conceived and developed.

To reach this goal, this paper examines different classes of physical annotations and proposes appropriate digital representations. This takes into account that most of a library's media is not available digitally. For this reason, BibPad is built in a way that supports both the annotation of digital and the annotation of physical media. Moreover, the annotations are not bound to a specific media, e.g., if at some point a digital version is available, the annotations of the physical version can be reused.

BibPad is mainly intended for the use in libraries. Users can easily add media via a barcode scan to their personal library and start creating annotations. Now that the annotations are digitally available, new possibilities for social interaction are opened up: users can create groups to share media and associated annotations with or even create public annotations. A shared annotation can be flagged as editable; in this case, every group member can edit and contribute to the annotation.

This paper results from an ongoing joint research project with the Bayerische Staatsbibliothek and the University of Munich. The Bayerische Staatsbibliothek possesses a large inventory of WWI media. Goal of this research project is to develop a semantic search engine for these media.

#### Binding Descriptions within a Universal Collective Catalogue

Antonio Carpallo and Esther Burgos, Faculty of Documentation, Universidad Complutense de Madrid, Spain

**Abstract:** From several years ago, at the University Complutense of Madrid, there is a research group working on an idea of developing a textual and graphic contents management tool capable of bringing together bibliographic descriptions of artistic bindings from various institutions, following the same descriptive format for all of them. Such development should be carried out within a free software environment by using PHP programming language, MySQL as database system, and finally including Dublin Core (DC) descriptive metadata. This Artistic Binding Union Catalogue (CCEA), worldwide pioneer, is being developed within the objectives of several research projects: Santander/Complutense (2007-2008), Plan Nacional de I+D+I (2009-2011), Plan

Nacional de I+D+I (2012-2014) and group BIBLIOPEGIA (research group on bindings and old books), and where some entities are also interested in participating such as, among others, the Spanish National Library, the Historical Library "Marqués de Vadecilla" (University Complutense of Madrid), the Cathedral of Toledo, the Regional Library of Castilla-La Mancha, the Historic Library of the City Council of Madrid, the Library of the Royal Academy of History and the Library of El Escorial.

Keywords: Content management tools, Free software, Binding computer-based cataloguing, Research projects

### Building Strategies for a National Open Access Data Repository Service

# Wonsik Shim<sup>1</sup> and Jeayeon Byun<sup>2</sup>

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**Abstract:** In recent years we are seeing an increasing number and stratification of data repositories. While the value of sharing data from scientific research is being widely recognized, systematic collection and organization of research data is still in its infancy and has many challenges to overcome.

In this discussion, we report on a major implementation of an open access data repository system called Korean Research Memory (KRM) by the National Research Fund (NRF) of Korea in terms of its system architecture and evolution of data collection efforts. NRF is a major research funding agency in Korea. As a centralized database for archiving data from publicly funded research projects in the areas of humanities and social sciences, KRM has been in operation since August 2007.

KRM database is based on the FRBR concept model that can better represent both the conceptual and physical aspects of research data files. Particularly, FRBR's four-layer hierarchy of Work, Expression, Manifestation, and Item lends a good structure for organizing research data in various types and formats.

In terms of data collection model, the goal is clear: researchers voluntarily submit data from their research in a timely manner. In the interim, NRF has funded a project that hires subject specialists who contact researchers to obtain data and create appropriate metadata. NRF funding policy requires researchers to deposit all forms of research outputs at the conclusion of their research. However, the reality is that cooperation from researchers has been inconsistent.

While institutional and discipline-based repositories constitute a mainstay for collecting, organizing and providing access to scientific and research data, a centralized, national data archive has its place. KRM, in this view, provides a fertile model for system design, data collection strategies, and operation of data archives.

**Keywords:** Open Access, Data, Archive, Repository, FRBR (Functional Requirements for Bibliographic Records), NRF (National Research Fund), KRM (Korean Research Memory)

# Challenged Materials Policies and Procedures at English Language Curriculum Universities in the Middle East: What Are We Doing, and Why Are We Doing It?

#### Ann Swallow

Zayed University, United Arab Emirates

Abstract: This research project began with a casual discussion about challenged materials among librarians working in the Persian Gulf region. Of these librarians, some had no policy at all for challenged materials and the policies that existed varied in purpose and scope. None of the librarians expressed complete satisfaction with what was currently in place. The first phase of this project conducts a short survey asking about the policies and procedures currently in place, who is involved in the decision making process about such policies and procedures, and what factors and interest groups are taken into consideration when making a policy. The scope of the survey is limited to academic libraries that are part of an English language curriculum institution in the Middle East. Most of the librarians surveyed have been educated in North America, Europe Australia or New Zealand. Librarians in the region who lack policies or have ones that they view as inadequate have expressed an interest in having model policies and procedures, or suggestions on what to consider when adapting or creating their own. This project presents some suggestions and best practices that should have a practical application for regional librarians. The presentation will begin with a short introduction to the cultural context in which these librarians work.

# Can impact be standardised? ISO 16439 standard as a new tool for evaluating the impact and value of library Markku Laitinen

National Library, Finland. E-mail: markku.laitinen@helsinki.fi

**Abstract:** A change of the paradigm of evaluation and management of libraries from quantitative and statistically oriented way of demonstrating library's outcome towards showing the impact and value of libraries is seen. This change of the paradigm results from the need to show the impact of libraries on society and on the patron organization as well as from the need to show that the investment in the library services was panned out and that the library services were delivered in an efficient manner. Because of this, the demand for a specification of library impact assessment has come topical. In response to this, the International Organization for Standardization (ISO) started in 2010 a working group targeting a tool for the purpose of strategic planning and internal management of libraries. As a result of this work, the international standard, Methods and procedures for assessing the impact of libraries (ISO 16439) will see the daylight these times. This article demonstrates the standard and contemplates its usability as a tool for management and of decision-making.

**Keywords:** libraries; evaluation; impact assessment; evidence based librarianship; statistics; ISO 16439

# Change Communication Can Be so Simple! Prof. Dr. Petra Düren

Hamburg University of Applied Sciences, HAW Hamburg, Faculty Design, Media & Information, Department Information, Hamburg, Germany

**Abstract:** Deliberate large-scale changes in libraries need an accompanying change management. One of the essential success factors of change management is the communication process, as insensitive communication, using e. g. ambiguous wording or inappropriate tonality can cause great damage throughout the change process.

Expert interviews with library managers did show that this change communication does not have to be something elaborate and outstanding using all new technological possibilities, but can be kept simple as the most important factors are to give enough information and to get into a conversation, a personal dialogue with team members.

The leader's own action – and with this his or her communication style – has a signalling effect on team members of which each leader needs to be aware of and which can be used to release an enormous pulse, especially during change processes.

This presentation shows the details of a change communication style which enables leaders to cope with deliberate large-scale changes. This empathic change communication style will be analysed and described on the basis of a thorough literature research as well as practical experiences of leaders of different hierarchical levels of academic and public libraries.

**Keywords:** Academic library, Change management, Communication style, Deliberate large-scale change, Empathic change communication style, Public library, Qualitative research

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### The Changing Face of Library Spaces: From Serials to Multimedia and Research Commons at the University of Zimbabwe

#### Lovemore Kusekwa

University of Zimbabwe, Zimbabwe

Abstract: The rise of electronic journals and the cancellation of print journals subscriptions is particularly a major contributor to the changing shape of the University of Zimbabwe Library. Faced with large volumes of print periodicals which were rarely in use and a shortage of space to accommodate computers for access to electronic resources, the library had to make a decision on what to do with the print periodicals in order to achieve optimum value from the space occupied by the periodicals. A decision was made to remove the print periodicals from the vast space that they were occupying. A comprehensive weeding exercise was embarked on to create more space in the library for books and periodicals. The space that was created on the book shelves was enough to house the print journals that were to be moved permanently to create space for computers. The space that used to house print journals was retrofitted to accommodate the multimedia centre and the research commons. The remainder of the space is now earmarked for a collaborative learning centre and postgraduate computer laboratory. This poster presentation describes the transition from print journals to technology driven innovations that were introduced at the University of Zimbabwe Library.

#### The Changing IT Trends: Are Academic Libraries Coping?

Maria G. N. Musoke, Prof. of Information Science & University Librarian, Makerere University, Timothy Sentamu, Systems Administrator, Makerere University Library, Andrew Mwesigwa, Academic Librarian, Makerere University Library

Abstract: Since the 1990's, there has been a proliferation of Information Technologies (ITs) in the Ugandan higher education sector with Makerere University (Mak) taking the lead at a national level. Since then, IT services and facilities have been gradually improving in quality and quantity in most institutions and at a personal level. By 2013, Makerere University Library (Maklib) alone had over 520 Personal Computers (PCs) in its bid to integrate ITs in all library functions. However, in recent times, there has been evidence of own laptops' usage by Maklib users. In response to this trend, Maklib redesigned space in 2012 in order to provide data points to accommodate laptop users as the wireless connection infrastructure could no longer handle the exponentially increased user population at Maklib. The paper reports findings of a quantitative study that investigated whether Maklib computers were still needed by library users. After a preliminary survey that revealed that 45% of all library users used IT facilities (29% used Maklib PCs, 19% own laptops, while 1% used Maklib OPAC terminals), and the rest were engaged in private study or discussion in the Group study facilities. The study highlighted reasons for the preferred IT facilities and its implications for policy on

academic library service delivery. The findings confirmed that the majority of library users still needed the PCs provided by Maklib for various reasons.

Keywords: IT usage, Computers in Libraries, Academic Libraries, Makerere University library

# The Changing Role of Library Standards: From Input/output Measures to User Outcomes

#### Steve Hiller

University of Washington, Seattle, USA

**Abstract:** International, national, regional, and association standards for libraries have undergone substantial change during the past twenty-five years. Traditional standards were usually based on quantitative data and evaluated library performance in numerical terms. They could be used internally within a library or institution as well as for benchmarking comparisons with other libraries. During the past twenty-five years, many professional associations and accrediting/auditing agencies shifted the focus away from inputs/outputs to the library contribution to user outcomes and institutional mission. The author has wide experience in standards development and currently chairs the International Standards Organisation (ISO) TC46/SC8 – [Library] Quality – Statistics and performance evaluation. This paper will examine the changes in library standards during the past twenty-five years and how they bring new relevance in documenting library contributions to individual and institutional success.

Standards have focused on input measures and statistics such as number of staff, staff and collections expenditures, and collection size as well as some library facility data such as number of seats, floor space and hours open. A few output measures were added related collections use, number of visitors, and reference and instruction. These library measures could also be correlated with institutional data to develop ratios such as the recommended number of library seats per population. While the scope of the comparative data that comprised library standards expanded they continued to be primarily internally focused quantitative performance measures that did not directly assess the actual impact and contribution of the library to individual or institutional success. Library standards became less relevant as professional associations, institutions and stakeholders focused on outcomes and stressed alignment with institutional mission and goals.

Recently national and international standards organizations have begun to incorporate user outcomes in revising existing library-related standards or developing new ones (e.g. the forthcoming ISO Standard 16439, *Methods and procedures for assessing the impact of libraries*). These use both qualitative and well as quantitative information to provide a fuller, richer picture of library contributions and impact.

# Citation Analysis – A Case Study of Webology Journals Mangala Hirwade<sup>1</sup>, Gulshan Damodhar Kuthe<sup>2</sup>

<sup>1</sup>Dr., Assistant Professor, DLISc, RTM Nagpur University, Nagpur, India

<sup>2</sup>Dr., Librarian, Dr. Babasaheb Ambedkar College of Engg. & Res., Wanadongri, Nagpur, India

Abstract: "Citation analysis" refers to references in one text to another text, with information on the source of that text. In the context of Library and Information Science (LIS), citation analysis is a valuable area of research. Since the fundamental role of the librarians is to facilitate the information accessibility by the information seekers, the accuracy and relevance of information they get will make the job of information seeker either easy or difficult. Furthermore, it has been observed that not all the information seekers get the most relevant and accurate information all the time as a reference for their work. Hence, in order to improve the value of research, the concept of citation analysis has a big role to play. In addition to this, the results of citation analysis will help the researchers to use the most correct as well as relevant information for their respective research effort. Hence, in the present study, a novel framework focusing on the utility of the citation analysis for the researchers is proposed. Since, the citation analysis is often carried out by the LIS professionals; this study proposes use of user feedback for citation analysis, which will augment the value scientific work, thereby improving the reliability of conclusions. Furthermore, the new framework has been evaluated with a case study using the citation analysis of the open access scientific journal Webology.

### A Citation Index Database Alternative for Humanities and Social Science

#### Katarzyna Zamłyńska and Wojtek Sylwestrzak

ICM, University of Warsaw, Poland

Abstract: We present a Polish citation database developed for the Polish Ministry of Science and Higher Education by CeON (the Centre for Open Science, a part of the Interdisciplinary Centre for Mathematical and Computational Modelling, University of Warsaw). While Polish mathematical and natural science publications are present in international journals, the research results in humanities and social science are not. A fundamental reason for this circumstance is that results in these fields are often published in Polish, and consequently, not easily available for international citations. The other reason is that the local scope of these research areas do not belong to the mainstream of interest. As a consequence, the humanities and social sciences tend to be published in Polish journals only, and finally they are not indexed in international databases. Therefore, there was an urgent need to build the database for Polish journals which would allow to measure their impact on the Polish science. The result of this requirement is the POL-index database. The system collects the standard metadata of the articles and their bibliography. Citation analysis will allow us to calculate a new impact factor of Polish journals - called PWW.

The meaningfulness of the PWW factor depends directly on the completeness of the POL-index database, which aims to aggregate data from all the Polish research journals. Therefore, the POL-index system has been designed to be very flexible in terms of data gathering. The main workflow will be based on close cooperation with Polish bibliographic databases, which in the future will minimize the engagement of representatives of scholarly journals.

The citation analysis is performed in two steps: first, the whole database is processed using a custom citation resolution algorithm developed by CeON, based on machine learning techniques. This algorithm is massively parallelized and implemented using big data processing techniques with Apache Hadoop. The accuracy of the results in this step is always less than 100%. The next phase involves a crowdsourcing solution - each visitor can point out mistakes (both false-positives and missed citations), which are then approved or rejected by system operators.

At this moment the whole system is ready and prepared to be launched. In a few months we expect to have the first results. The POL-index system will be available in open source and can be implemented to address similar problems in other countries, where research results in humanities and social science are often published in local languages.

**Keywords:** POL-index, Centre for Open Sciende, Citation analysis, Evaluation of scholarly journals, Impact Factor, Scholarly communication

## Clients' Perspective - Qualitative Methodologies for Gathering Data to Support Decision Making in a Modern Research Library

#### Grazyna Tydda

Formerly of Macquarie University Library, State Library of NSW, Sydney, Australia

#### Abstract

**Purpose** - This paper explores various ways of gathering qualitative evidence about clients' needs and expectations in a modern research library.

**Method -** A number of qualitative methodologies are discussed: 1) observational studies; 2) occupancy studies; 3) usability studies; 4) focus groups; and 5) interviews. These methodologies involve library staff in gathering and analysing evidence.

**Approach -** For a number of years, the digital revolution has presented us with exciting technological opportunities. With these opportunities we also are facing a threat of competition which requires a significant shift in positioning ourselves in this changed market place. Where client needs and expectations are concerned, there is a need for empirical evidence in order to respond in an appropriate and timely manner to our current challenging environment. While libraries are good at regularly gathering qualitative data we do not conduct sufficient client research on a regular basis.

This paper has evolved from the discussion that took place at the QQML in Rome, 2013.

**Keywords:** Library management, Evidence based Decision making, Library management, Evaluation studies, Librarianship, Studies

# Closing the Loop: Using LibQUAL+ Results for Continuous Improvement

Marwin Britto, Ph.D., MLIS

Associate Dean, University Library, University of Saskatchewan, Canada

**Abstract:** More than 1,200 libraries have used LibQUAL+ to identify the gap between library users' expectations and levels of service delivery. The reports which emerge from the survey results are extensive and comprehensive. For a variety of reasons, knowing how to analyze the data and then use the resulting analysis for continuous improvement is an important but often difficult outcome to attain for a variety of reasons. This presentation explores one library's process for "closing the loop"—that is, analyzing the user survey data and subsequently creating an actionable plan to implement strategic improvements for library users.

# The Collaboration between Library and Museum DigitalSSM Deniz Baltaci, Oya Arus

Sabanci University Information Center, Turkey

**Abstract:** Founded by Sabancı Foundation, Sabancı University commenced providing education in 1999. In 2002, Sakıp Sabancı Museum was launched under the University's shelter. Holding a significant place in the field of museology in Turkey, the institution decided to make the collections public in the digital environment. Information Center, which is one of Sabancı University's service divisions and possessing works and experience in digitalization, collaborated with Sakıp Sabancı Museum with its responsibility imposed along with its mission of contributing to national and international knowledge.

Purpose of the project is to organize and digitalize sources of information within the bosom of the Museum, to ensure their transmission to the future generations, to store the digital copies to be shared worldwide in accordance with their respective copyrights. The project covers 77,000-page works, former exhibitions and paintings and calligraphy works in the bosom of the Museum collection. In this scope, The Arts of the Book and Calligraphy Collection, Painting Collection, Emirgan Collection (photography) and Abidin Dino Collection have been digitalized. The project was designed to provide national and international scholars, researchers, museum employees and directors, those interested Turkish and Islamic art, collectors and art history students with a significant resource, which would also contribute to Turkey's cultural heritage. Initiated in April 2011, for the project a team of Museum and Information Center employees was built. Software and hardware requirements for the project was determined, assessed and selected. Project costs were calculated and works initiated after obtaining the financing. Service for the tools used in work digitalization was outsourced, and Contentdm software from the firm OCLC was used. As metadata Dublin Core and Categories for the Description of Works of Art (CDWA), for the authority records created for the works Library of Congress Authorities, VIAF (Virtual International Authority File), ULAN (The Union List of Artist Names), Encyclopedia of Islam, İbnül Emin Mahmut Kemal's book titled Son Hattatlar (The Last Calligraphists), as well as Sakıp Sabancı Museum The Arts of the Book and Calligraphy Collection catalogue were considered. Upon completion of the project, title and logo works initiated for its promotion. The web page was designed in view of the needs, and the press release for "digitalSSM" project was prepared and announced worldwide. The project is one of the most important ones in the field, where the entire museum collection is digitalized in Turkey in accordance with the international standards, stored in international standards, where an international program is used, that covers all information on the works and realized in the framework of the collaboration between Library and Museum. In this study, we will express the collaboration between both institutions and their experiences.

Keywords: Digitization, Collaboration, Museum, Information center, Turkey

# Communicating the Library's Value Zsuzsa Koltay

Director, Assessment and Communication, Cornell University Library, USA

**Abstract:** Recent higher education trends, the contracting economy, and the effects of the web on research libraries have all contributed to increasing calls for accountability, especially when it comes to budget decisions. How can research libraries demonstrate their value? Can we quantify that value, show it in a graph and tie it neatly to academic success? Are libraries commodities or a public good? In other words, do we apportion library costs based on a pay per use model or on a taxation model? Cornell University has recently implemented a new budget model that distributes library costs to all the colleges and schools based on their faculty and student head counts. This new budget model served as the impetus for us to reevaluate our contributions to the university, to students and to faculty.

This presentation focuses on library assessment and communication strategies and techniques that triangulate value and impact, track cross-campus library use patterns, and work with the library liaison program to cultivate faculty relationships and grass-roots support and advocacy. They are designed to reinforce the library as a public good that has a lasting impact on its users.

### A Comparative Evaluation Comparison of Iran and Malaysia National Digital Libraries Based on DigiQUAL Protocol

Safie Tahmasebi Limoni, Mitra Ghiasi, Zahra Abazarim

Islamic Azad University, Babol Branch, Department of Library and Information Sciences, Iran

#### **Abstract:**

**Aim:** The target of doing this research is Comparative evaluation for national Libraries of Islamic Republic of Iran and Malaysia based on Digiqual Protocol.

**Methodology:** The research Method is Library and survey- analytic of comparative type. The research population of this study consists of IR.D.Nlib and M.D.Nlib. The research tool is a reviewed checklist developed by Digiqual Protocol. Collective data have been analyzed using descriptive-inferential statistics as well as SPSS application.

**Findings:** The Findings indicate that M.D.Nlib obtains the highest score for digital Libraries status dealing with web attraction while, IR.D.Nlib has received higher score for reviewability, search ability, collection building, organization, complying intellectual

laws, sharing/collaboration and mail groups, discussion groups, chat rooms, and various associations. Both Libraries have achieved similar score for other factors (accessibility, access security/control, and constant stability/development).

**Conclusion:** Regarding the rating on evaluation tool and total points, the studied DLs have received above 60% of the potential score of evaluation tool developed by Digiqual indicating excessive performance of these libraries. In addition, the points show that the optimal operation of the studied DLs is considered for IR.D.Nlib and M.D.Nlib with 83% and 61.1% respectively.

**Keywords:** Comparative study, Digital libraries DLs, Digiqual protocol, National library NL, Iran, Malaysia

# A Comparative Study of Scientific Journal Databases in the Social Sciences and the Humanities (WOS, Scopus, ERIH, AERES)

# Michèle Dassa<sup>1</sup> and Christine Kosmopoulos<sup>2</sup>

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**Abstract:** The use of digital resources and the affirmation of the effectiveness of research assessment exercises have shed a new light on the issue of bibliometrics. Pressure from institutions involved with putting journals online has sped up the development of bibliometric tools, and since 2004 has given rise to the elaboration of a whole series of metrics. The question of the application of this bibliometric model has come up frequently in the Social Sciences and the Humanities (SSH) throughout the international community over the past few years.

Presented for the first time, a comparative website of the contents of the databases that list the journals in the Social Sciences and the Humanities (SSH) named JournalBase has been published and updated since 2009. The study covers the AHCI and the SSCI of the Web of Science (published by Thomson Reuters) and Scopus (published by Elsevier), as well as the European Reference Index for Humanities (ERIH) (published by the European Science Foundation) and the lists of the French Agency of Assessment, Agence pour l'Evaluation de la Recherche et de l'Enseignement Supérieur (AERES). The research was carried out in 2008 with the financial support of the TGE Adonis of the CNRS in France. With around 14,500 different journals, this is an almost exhaustive overview of the wealth of publications in the Social Sciences and the Humanities. We adopted the same nomenclature for classifying the journals according to their disciplines as the one used in 27 headlines of the European Science Foundation.

JournalBase is intended for the international scientific community in SSH, and also for European and international scientific organizations, experts in scientific information, producers of scientific information on a broad scale (commercial or institutional publishers, publishers of journals in open access) and for national and international evaluation authorities. This is why JournalBase is freely accessible in a bilingual English/French version.

In addition, JournalBase is an original tool for the academic libraries and researchers seeking for an international journal in their discipline. It provides useful information for

each journal, such as language, country, publisher, website, ISSN, inclusion in the DOAJ, etc.

The presentation reviews the context and the history of the project, the reasons that motivated the study, the methodology that we established for the comparison of the different coverage (WOS, Scopus, ERIH, AERES) as well as statistical analysis with the latest data of JournalBase. A specific study concerning the Turkish journals in SSH is also presented.

The purpose of this work is to provide detailed information about the contents of these bibliometric databases in the field of Social Sciences and the Humanities (SSH), so that experts in scientific information, decision-makers, scientists and students may have upto-date information at their disposal for their research, and may contribute to moving the thinking on these questions forward by sharing their experiences and discussing alternative methods of communication and evaluation.

Generally the results of our analysis from 2010 till 2013 demonstrate the bias and the limits of these instruments concerning the scientific outputs of research in SSH. As a matter of fact, only 10% of the titles remain common to the four sources. This means that none of the different bibliometric databases can provide accurate indicators for citations in these topics. We also observe that whatever the country of the publisher, a majority of the publications are in English, especially in Germany. Finally, the lists of ERIH appear to be the most appropriate for the coverage of the journals in Europe, but unfortunately they do not include the Social Science journals.

**Keywords:** Bibliometric research, Social Sciences, Humanities, Journals, WOS, Scopus, ERIH, AERES, DOAJ, JournalBase

# Comparison of Academic Publishing in Public and Private Universities in Albania: A Bibliometric Analysis Florida Misha

Director of Scientific Library of Politechnic University, Tirana, Albania

Abstract: This paper is the first bibliometric study made in the Republic of Albania. It analyzed the publication patterns of Albanian professors consisting of the published papers with addresses of the Polytechnic Public and Private Universities only, for the period 2008-2013, covering articles published in Albanian and in International journals. The comparative study of the scientific production in the country is made using the bibliographic data of the four Albanian universities and the dates from Web of Science (WoSc). The research showed some interesting results. The Public Polytechnic University of Tirana had 55 scientific articles for the period 2008-2013 published in Scientific Bulletin in Albanian language and 145 scientific articles for the above period published in International journals in English Language. A low domestic production in terms of articles for a University 57 years old as the Polytechnic University it is. Epoka University had 35, scientific articles for the period 2008-2013, published in international journals only in English Language. The scientific productivity of Epoka University is higher than two other private universities from one side, from the other side is very high because is a new University. Polis University for the period 2009-2012, had 61 scientific articles in English Language, 43 in Albanian Language 5 in Italian Language, but all published in Journal "Forum" A+P. Albanian University had only 9 articles in Albanian language. These publications bring a positive impact not only in the curricula of these universities, but also bring a positive impact for young researchers. Our study opens the possibility for comparison and research evaluation using data from Web of Science.

### Comparison of Lecture and Combined Teaching Methods on Satisfaction of Medical Students in Information Systems Course

### Leila Nemati-Anaraki

Assistant Professor, Iranian Research Institute for Information Science and Technology, Tehran, Iran

#### **Abstract:**

**Introduction:** Considering the importance of medical information systems and databases for medical students and doctors and also the role of Librariand and information professionalists in this field, its teaching methods are important. Using the appropriate teaching methods, teaching are trying to improve the effective learning and knowledge retention of students in using and retrieving essential knowledge from different medical databases. So, the purpose of this study was to determine the effects of lecture and composed teaching methods on learning of medical students and also to assess satisfaction from the composed method.

**Methods:** In this quasi-experimental study, 60 medical students of Iran University of Medical Sciences who had selected medical information systems course in the academic year 2012-2013 were randomly divided in to two groups as experiment and control. To assess their knowledge, students were given a pre-test. Then, the control group received instruction through lecture method and the experiment group formed 5-member subgroups and received instruction through a blended of lecture and group discussion method. Then, both groups took a post-test. Also, the attitude of experimental group was assessed by a researcher-made Likert scale questionnaire. The data were analyzed through INSTANT software using t-test.

**Results:** There was no statistically significant difference between the mean of pre-test and post-test scores in the two groups. Students in the experiment group, believed the method leads to the better feeling (63%) and satisfaction (96%) about medical information systems course, internal motivation to learn course (43%), and a better student and teacher relationship (96%).

**Conclusion:** Composed teaching method could be useful in teaching course of medical systems by promoting learner's internal motivation, increasing learning and satisfaction.

**Keywords:** Composed method (Blended method), Lecture, Medical students, Learning, Satisfaction, Information Systems Course

# A Comparison of Precision in General Search Engines Radiology Image Retrieval

### Omolbanin Asadi Qadikolaee<sup>1</sup> and Saeed Asadi<sup>2</sup>

<sup>1</sup>MSc student of Library and Medical Science, Shahed University, Iran <sup>2</sup>Faculty of Humanities, Shahed University, Iran

**Abstract:** The aim of this study was to compare the general search engines in radiology image retrieval and ranking them in terms of accuracy, respectively.

The method used is applied research - survey - analysis. For doing this, 5 disease groups including heart and brain strokes, coronary artery diseases, cancers, cerebral embolism and respiratory diseases based on death statistics book that had the highest mortality in Iran. So 8 keywords have been selected. The keywords in heart and brain strokes group are: Myocardial infraction and Coronary Disease; in cardiovascular group: heart failure and Brain Embolism; in cancers group: lung cancer and bronchial cancer; in perinatal diseases: Fetus Hydrops and in respiratory diseases group: pneumonia were selected.

These keywords had been searched in the selected general search engines such as Google, Yahoo, Bing. Then top 10 result images which retrieved in each search engine had been stored and presented to 30 Radiologist in several hospitals by using researcher made tool.

In terms of accuracy, due to significant differences between search engines, Google with 95% accuracy is in 1st place, the next one is Yahoo with 92%, Bing with 89.1% is allocated to the next rank.

Keywords: Image Retrieval, Information Retrieval, Search Engine Comparison

### Competitive Intelligence as a new Way for the Development of Territories

#### Christian Bourret

University of Paris - East Marne la Vallée - UPEM, Professor of University in Information and Communication Sciences, Research Team DICEN: CNAM / UPEM, Paris, France

#### Abstract:

#### 1 – What about Competitive or Economic Intelligence?

In France it is a relatively new concept appeared in 1994 with the Martre's report and developed after the Carayon's report (2003), especially by A. Juillet.

It was also – but without the CI concept being really expressed – a main goal of the companies in the past, for example for H. Wilensky as Organizational Intelligence as soon as 1967. After CI also met the notion of Quality with difficult relations with Standards and Assessment (Bourret).

We can consider CI as the best way to give the good information to the good people at the good moment. There may exist two different approaches of CI:

1) a first one limited to the companies (watching, security of data, information system and intangible patrimony around patents and trademarks, but also policy of influence for example with e-reputation) and so the relations of a company to its whole environment.

2) a more global one or CI for a State or a region, with the impacts of economic with another factors and particularly competitiveness and development.

We then meet the issue of territories, even central in the case of the CI limited approach, the company being a social form, a system or a territory for the development of actions. In this case, we can speak of new territories of CI: accounting, financial intelligence, juridical intelligence (Duval).

#### 2 – Competitive Intelligence and Territories

So even in the limited approach of CI, the question of territories is a central one. The issues of Competitiveness and Territories are also very interconnected.

They are also strongly linked with the issue of innovation as for the Godet – Durance – Mousli report (2010) or how "Unleashing innovation on territories", explaining that innovation is not only technical but also organizational or societal. For G. Garel, innovation is above all "creation of value" and we may add creation of value on a territory.

So for us we may speak of Economic Territorial Intelligence.

#### 3 - Competitive Intelligence and Society

Coming from companies or organizations, Competitive Intelligence necessarily meets territories and has of course a social or societal dimension. It is the P. Clerc's approach in Duval (2008) according to the S. Dedijer's and the Swedish school of CI approach.

It was also the perspective of Carayon's report (2003) which linked Competitiveness and Social Cohesion. In this approach, the role of Social Protection is very important, particularly in times of crisis: 33 % of French GDP is devoted to Social Protection. Social Protection is not only a cost but also an investment, particularly in disadvantaged areas cf. H. Azoulay in Duval: the question of suburbs and unemployed people, especially young people.

In this societal aspect, there exists another new territories of CI: Sports, Culture, Humanitarian.

#### 4 – Towards a new approach of Knowledge

In CI, the role of Data and so that of Libraries is a key one especially as new resources with the issue of open data. But the crucial issue is that of the uses of data for development. CI must imply a new form of Shared Knowledge, Collective Knowledge. We must also "learning to learn" cf. E. Morin. This challenge has been focused by D. Wolton: "to inform is not to communicate". Not only collect and transfer data but learn to use them in action to cooperate. It is a societal and more global challenge for the future of our society and not only for companies.

**Keywords:** Competitive Intelligence, Territories, Development, Information, Cooperations

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# A Conceptual Model of Library E-service Quality Olga Einasto

Head, Library Services, University of Tartu Library, Estonia

#### Abstract:

#### **Purpose**

Service quality studies contribute a very important field of research in the contemporary library and information sciences. Technological development and social transformation have changed a library as a social institution as well as library services. Today librarians need a better understanding of the nature of e-services and their quality. The first and most important step to improve quality is the identification of its components. The aim of this paper is to present and discuss the conceptual model of library e-service quality.

#### Theoretical approach/methodology

They are two main theoretical approaches to service quality research – the technological and the marketing approaches. This study tries to implement additionally a new, social approach with some concepts from communication theories (McLuhan, McQuail, Certeau). The dimensions for a conceptual model of e-service quality have been clarified with the help of qualitative (focus-groups) study and quantitative survey.

#### **Findings**

Based on theoretical review and empirical researches a multidimensional model of library e-service quality is proposed. The conducted research reveals the following:

- what do users perceive as key attributes of quality in e-services,
- how can users perceptions be combined into a general conceptual model for explaining e-service quality from the users standpoint.

#### Value and implication

This paper explores new directions in service quality research and offers practical help to researchers and practitioners for service quality improvement. This paper also provides an agenda for future qualitative and quantitative researches in this field.

# Constructing a Structured Glossary for a Knowledge Map of Scholarly Articles: Case Study of Structural Terminology Net (STNet) in Korea

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**Abstract:** Every journal article contains a title, abstract, body, and author keywords generally derived from core academic terminologies. Two or more journal articles are said to be related when they share the same keyword(s), putting them in identical or similar conceptual categories. For example, a scholarly article that contains the term 'literacy' as its author keyword can be linked to numerous other articles in the fields of Library Science (e.g. articles about information literacy), Pedagogy (e.g. articles about literacy) and Mass Communication (e.g. articles about media literacy). Therefore, creating a glossary structured around the basis for meaning and major academic terminologies (in this case, author keywords) makes it possible to draw up a knowledge map of a specific field through scholarly articles that contain pertinent terminologies.

Structural Terminology Net (STNet), which began in September 2012 and will be ongoing until August 2015, is a research project aimed at constructing a structured glossary for a knowledge map on interrelated articles in the Humanities and Social Sciences. To date, we have extracted academic terminologies from journal articles in the Korea Citation Index (KCI), classified each of the extracted terminologies by semantics, and associated various relationships between these and other terminologies. This study is based on the interim stages of the STNet project from September 2012 to August 2013.

First, in order to choose major academic terminologies, we collected approximately 2 million author keywords from KCI scholarly articles published during the period of 2007 to 2012. We then corrected errors within these author keywords (misspellings, omitted words, etc.) and selected 60,000 core terminologies using various criteria based on subject and occurrence frequency.

Second, in order to group similar concepts among author keywords used in a disparate manner due to their having been formulated by different researchers in the Humanities and Social Sciences, we created conceptual categories called 'classes' and relationship properties required for the design of a structured glossary construction system. Conceptual categories were based on general knowledge structures and relationship properties were expanded from thesaurus relationships (equivalence, hierarchical, and associative).

Finally, we developed the STNet system in order to build a structured glossary and conducted a pilot test by inputting data (definitions, classes, relationship properties etc.) related to approximately 5,000 academic terminologies contained in the system.

We plan to complete this structured glossary by August 2015 using 60,000 terms from the collected keywords by August 2015. The final purpose of the STNet project is to construct an ontology system as a knowledge base upon which to draw up a knowledge map on scholarly articles. The ontology system would be formulated through the creation of inference rules between relationship properties and conceptual categories of academic terminologies in the STNet system.

**Keywords:** Structured Glossary, STNet (Structural Terminology Net), Author Keywords, KCI (Korea Citation Index), Academic Terminology, Knowledge Map, Ontology

### Convergence or Divergence between National and **International Journals? Subject and Collaboration Trends in** Singapore's LIS Research

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Abstract: This study aimed to identify the subjects and authorship collaboration patterns of Library and Information Science (LIS) journal articles published by author in Singapore between 1970 and 2012. Content analysis was used to examine 739 papers from the Library, Information Science & Technology Abstracts and from the Singapore Journal of Library & Information Management. The findings show a shift towards coauthorship and international publishing. Overall, libraries and library services were studied the most. Among different library types, academic libraries received the most attention. In terms of the differences between national and international papers, chisquare tests show that subject differences had reduced over the years. The findings should be of interest to scholars of LIS development, and also to scholars of scientific communications who are interested in the dynamics between globalisation and localisation of journal publications.

Keywords: Library and information science, Subject trends, Authorship, Scholarly communication, Bibliometrics

### **Core Patents Mining Based on Cross Co-Occurrence Analysis** to Patent Technology-Effect Subject Terms and Citations

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<sup>1</sup>Chengdu Library of the Chinese Academy of Science, P. R. China <sup>2</sup>University of Chinese Academy of Sciences, P. R. China

Abstract: Based on a deep analysis to the current core patent mining methods, we constructed technology-effect subject terms and patent citations cross co-occurrence to mine core patent clusters. Through the cross co-occurrence analysis to patent technology-effect subject terms, we can easily identify the core patent clusters with similar technology-effect topics. Meanwhile, the technology-effect subject terms can also get a cross co-occurrence through the cited patents to each other, which help to identify the relationship of the various technology topics in a specific field. Finally, in this article, we chose patent literatures about "medical microscopy endoscopy system and technology" as empirical study to display the charateristic of cross co-occurrence way, and advantages and disadvantages among the cross co-occurrence of technology-effect subject terms with patent citations, and the patent co-citation analysis in visualization network map. The results of empirical study proves that the cross co-occurence way may intuitively reveal the technical topics and innovations, but since the two kinds of methods

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involved different data mining principles, the cross co-occurence may neglect the potentially important core patent literatures.

**Keywords:** Co-occurrence analysis, Topic mining, Citation analysis, Patent Technology–Effect matrix, Patentometrics

# The Correct Language for Local Publications in East Africa: A Qualitative Inquiry into Subject Cataloguing

Eliz Nassali State, Senior Librarian, Makerere University Library

Abstract: Libraries are known as spaces of control. Among the different controls is the linguistic control through controlled vocabulary aimed at providing users a consistent access to information. However, despite the well intentioned standard, publications outside the Western world are forced to fit under guise of universal standards to the detriment of users who are incognisant of the prescribed language. The Eurocentric nature of the subject headings does not favour local publications and instead hinders access to critical research for national development. A qualitative study was carried out at PhD level. The methods included interviews, document reviews and observations. Data was transcribed and manually coded. The findings indicate the following: Adherence to cataloguing standards takes precedence over subject access. Rarely, is a user, the focus of subject term choice in the process of cataloguing. The terms assigned to local publications are generally too broad and at times border on inappropriateness to adequately represent the local publications. The situation is exacerbated by lack of documented cataloguing policies and a waning interest in cataloguing work among the professionals. A model to improve the cataloguing process is proposed.

Keywords: Subject cataloguing, Controlled vocabulary, Local publications, Subject access

## The Correlation between Scientific Publications of University of Primorska and the Price of ScienceDirect

#### Petruša Miholič

University of Primorska, University Library, Slovenia

**Abstract:** Researchers for their work need appropriate scientific literature. The performance of their work is assessed with the publication of research results in the scientific literature and with citation of their published works. The monitoring and dissemination of scientific achievements is an essential element of the research work. For scientific publications, that in the process of scientific communication post results of research work, the visibility is crucial. Researchers contribute to the visibility with their publications.

The University of Primorska is one of three public universities in Slovenia and is the youngest and smallest. It was founded in 2003. In 2013 employed 484 researchers and enrolled 6.606 students. Within the university operates six faculties and two research institutes. University of Maribor was established in 1975, has 17 faculties, which

employs 1.048 researchers. The oldest Slovenian University, University of Ljubljana, was founded in 1919, has 23 faculties and 3 Art Academy. It employs 2.717 researchers. Researchers of the University of Primorska have access to a wide range of scientific literature through seven consortia: ScienceDirect, SpringerLink, Wiley Online, JSTOR, SAGE, Emerald and EBSCOhost. At the level of Slovenia consortia ScienceDirect, SpringerLink, Wiley Online and JSTOR is regulated by the Central Technological Library, while EBSCOhost Emerald and SAGE, is regulated by National and University Library. Accesses to seven consortia have also University of Nova Gorica and other independent research institutes (National Institute of Chemistry, Jožef Stefan Institute, Geological Survey of Slovenia, Institute of Oncology, Agricultural Institute of Slovenia, etc.). Slovenian Research Agency (ARRS) in the large proportion of financial support funded access to international scientific literature. But from year to year financial support is decreasing. In 2013, for all seven consortia University of Primorska paid extra 22.891 euros (in 2011 4.703 euros and in 2012 13.781 euros).

Our paper will focus on research how many and where researchers of our university published their works in 2013, depending on the proportion of costs for each consortium. We used the citation database Web of Science to provide the information about the publications of our researchers. In the study we have included only the consortia ScienceDirect. In 2013, 28% of the total charge for seven consortia, University of Primorska paid for ScienceDirect. We were wondering whether there is a correlation between the amount of funding for the consortia and publications of our researchers in a particular consortium.

Keywords: Scientific publications, Researchers, Consortium, Costs, ScienceDirect

# Corruption & Distortion: The Dark Side of Digitization Arielle Cohen

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**Abstract:** As a result of the acceptance of digitization in libraries, there has been a trend to digitize material simply "because we can," without any regard for potential problems. While acknowledging the benefits of digitization, this paper also highlights how digitization processes corrupt source material, as well as user experience, through the distortion of material and context. Additionally, this paper discusses the role of library and information professionals in guaranteeing that digitization projects result in positive outcomes.

**Keywords:** Digitization, Case studies, Digital technology, Image distortion, Data corruption

# Cost Effectiveness of Periodicals and Reference Services in University Libraries in India

#### P.M Naushad Ali<sup>1</sup> and Md. Imran Ahmad<sup>2</sup>

<sup>1</sup>Aligarh Muslim University, Aligarh, India

Abstract: In modern era, the use of cost effectiveness analysis to set management technic has attracted a large and high-profile group of supporters. Libraries are needed for mainly two reasons, one can purchase only a limited number of reading materials and some of them are beyond his ability because of exorbitant prices. The second reason is that libraries provide a good environment for learning. Cost effectiveness is a novel concept to evaluate the functioning of libraries as library is not a commercial institution. Hence a purely cost and profit approach cannot be applied. Cost effectiveness analysis is one in which both economic and social costs are duly considered. Cost effectiveness analysis offers a way of achieving superior management technique results at a lower cost to society than other available approaches. Most of the academic libraries in India have been facing financial as well as technological constraints. With the advent of information technology, the environment of university libraries has changed dramatically. Information technology is being used in libraries to process, store, retrieve and disseminate information. The study of cost effectiveness of all services is necessary in order to streamline services, particularly, due to ever increasing number of reading materials and their cost on subscription of journals and queries entertained in academic libraries. Research will be focused on effect of IT on university environment. This study will be applicable in all service sectors for the development of human beings for the welfare of the people and welfare of the state. And this can be overcome easily with the help of change in the information technology in the activities of libraries and give better services to the users. The relevant comparison of resources of finance, patterns of allocation of funds across the different service departments and unit cost per user among Central Libraries of Aligarh Muslim University, Aligarh and Delhi University, Delhi will be made to sort out the existing problems in optimizing their resources, and usage within, which the budget will be helpful in enhancing the research output and academic excellence. Understand cost effectiveness of periodicals and reference services in MAL, AMU, CL, DU, Delhi. Although examine cost effectiveness of Reference sections of university libraries under the study and as well as asses the satisfaction levels of the users of university libraries under study with regard to library services. The researcher has limited the study to the libraries of two central universities as these universities are well established in learning and research and as per The Times Higher Education World Reputation Rankings list the University of Delhi takes sixth place and Aligarh Muslim University takes ninth place the first fully fledged comprehensive university on the list (www.timeshighereducation.co.uk/world-university-ranking/2013/repution-ranking). One is from Delhi, which are University of Delhi and one from the state of Uttar Pradesh that is Aligarh Muslim University, Aligarh, which is the oldest university. The quantitative and qualitative data will be collected through the filled questionnaires will be manually entered into a numerically coded MS. Excel spreadsheet. The data will be then entered and analysed using the SPSS (Vers. 16.0) statistical software program using chi square methods. The analysis of the data will be attempted to provide information that may be generalized to a much larger population. The data will have been organized, analysed, compared, tabulated and interpreted by using statistical techniques, tables and percentage.

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**Keywords:** Cost effectiveness, Services, Periodicals, Reference Services, University library, Information Technology, University of Delhi, Aligarh Muslim University

# Cross-Cultural Perspectives in Turkish Children Literature Esin Sultan Oğuz

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**Abstract:** Multicultural children's literature is about the sociocultural experiences of underserved groups. It validates these groups' experiences, which are occurring because of differences in language, race, gender, class, ethnicity, identity, and sexual orientation. One of the major purposes of children's literature is to be inclusive of, and provide validation for, all children's experiences. Hence, books from many different sociocultural backgrounds are included in public library collections (Gopalakrishnan, 2011, p.5-7).

One of the greatest challenges of library services in the 21st century is to program user services for diversity. In many countries, librarians and library services are not well prepared in their service provision and collection development, and do not meet the diverse needs of young children. Multicultural patterns in children's books can augment youth education by taking into account cultural, ethnic, and social diversity in order to challenge prejudices and inequality.

The majority of studies on children's multicultural literature has focused on how this literature fits into the classroom [Burroughs (1999); Canen (2003); Willis-Rivera & Meeker (2002); Bernstein, Zimmerman, Werner-Wilson et. al (2002); Rivera & Meeker (2002); Qiuyan, Lin (2005)]. Schwartz (1995) and Lickteig & Danielson (1995) examined the politics and problems defining what multicultural children's literature is, tracing these definitions from a traditional to a critical, postmodern perspective.

The main research question of this study is <how body of literature be inclusive of many diverse perspectives and reflect the stories, experiences, and voices of all children?>. Selected multicultural children books will be examined according to a checklist created by the researcher. The set of criteria that will be used will cover the attributes of quality multicultural literature, thereby outlining the characteristics of the "ideal children's book." One such check list was created by Higgins (2012) and used in her study Multicultural Children's Literature: Creating and Applying an Evaluation Tool in Response to the Needs of Urban Educators. This checklist will be modified according to the characteristics of the selected library collections and targeted towards library users. The checklist will include the following: The literary quality of the work, Distortions or omissions of history, Stereotyping, Loaded words, Lifestyles, Dialogue, Standards of success, The role of females, elders, and the family, Possible effects on a child's self-image, The author's and/or illustrator's background, Illustrations, Relationships between characters from different cultures, Heroines and Heroes, The copyright date.

**Keywords:** Children books, Multicultural education, Intercultural education, Diversity, Early literacy

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# The Czech Digital Library - A Solution for Aggregation, Reuse and Dissemination of a Digital Content

#### Martin Lhotak

Director of the Library of the Academy of Sciences of the Czech Republic, Czech Republic

**Abstract:** The goal of the project is to create the Czech Digital Library ("CDL") http://www.czechdigitallibrary.cz/ which will aggregate content of digital libraries in the Czech Republic. It will serve both as a uniform interface for end-users and as a primary data provider for international projects, especially for the Europeana and TEL – The European Library.

The open source Kramerius 4 system is the initial software solution for the Czech Digital Library. Kramerius 4 is based on the Fedora Commons repository system and is widely used as a digital library system in the Czech Republic. It was developed jointly through the cooperation of the Library of the Academy of Sciences and the National Library of the Czech. Besides data harvesting from different instances of the Kramerius 4 system, it is also necessary to arrange a connection with other systems used in the Czech libraries (e.g., Dspace, Eprints). One of the main goals in the frame of the project is the development of the Kramerius system https://github.com/ceskaexpedice/kramerius.

The Czech Digital Library will serve as an OAI-PMH provider compatible with Europeana. Some other OAI-PMH profiles might also be implemented to facilitate cooperation with other international projects.

Other open source tool called ProArc https://code.google.com/p/archivacni-system/ to support complex digitization processes is developed in the frame of the CDL project.

Included are digital documents processing and archiving solutions based on the Fedora Commons repository. The goal is to use these tools to increase the number of materials available e Czech Digital Library. Using the same production and archiving tolls will enhance interoperability and data sharing between individual digitization projects. The rapid semi-automatic creation of the standard metadata is enabled by the production system before its complete placement in the work process. It is comprised of structural, descriptive and archival metadata, OCR and conversion to specific graphical formats.

With regard to the archival part of the solution, standards for long term archiving, such as the OAIS model, will be implemented.

Mutual interoperability between all developed systems and tools is accented in the frame of the project as well as interoperability with solutions already existing on the market. The aim is to share, use and reuse digital content as easily and effectively as possible with open source solutions.

# Data is Not a Dirty Word: Changing Needs in the Academic Social Science User Community

Colleen S. Harris-Keith

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Abstract: With the focus of American higher education moving toward experiential learning and practical application of theory, social science curricula are requiring that undergraduate (and graduate) students establish research questions and analyze established datasets (such as those offered by ICPSR and Roper) or collect and analyze their own data to demonstrate proficiency. Particularly research universities and their libraries have addressed this growing need with offering statistical software packages (such as SPSS, STATA, SAS) and workshops on using those packages to support student and faculty needs in the area of quantitative methods. However, this growth of data use in the curriculum in the social sciences is a prime opportunity to assist in the development of higher-level information literacy with regard to data and analysis, scaffolding the often composition-heavy presence of library instruction programs deeper into the social sciences. Teaching students commands to enter into software does nothing to advance their understanding of data analysis, which involves deep understanding behind the methods used to collect the data, understanding the variables, determining whether the dataset is appropriate to answer the research questions, and then making decisions as to appropriate measures for the relationship between variables and research questions. Making librarians crucial partners in methodology classes in the social sciences creates an avenue for students to truly understand the connections between the pressing public policy questions they ask and the statistical analyses they perform, a connection too often obfuscated by dread of statistics.

Keywords: Information Literacy, Data literacy, Social sciences, Data analysis

# Defining a Future-focused, Competency Profile for the Academic Librarian in Italy

Laura Armiero, Mary Joan Crowley

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**Abstract:** A librarian in Italy is not a chartered profession. Indeed librarians, regardless of the sector of activity, often do not have a degree or any pertinent qualification, nor is there any set standards of professional competency to adhere to. The Association of Italian Librarians (AIB) has recently launched a public call from the Italian Organization of Standardization (UNI) in an attempt to define a standard for what in Italy falls under the heading of a "non organised profession". This standard should set the requirements, specifications, and competencies of librarians and knowledge practitioners. The 59 libraries of Sapienza - University of Rome, the largest university in Italy if not in Europe, cater to a student population of just over 100000, a faculty of 3800 and about 4000 administrative and technical staff. There are 300 staff currently working in the various Faculty and Department libraries. The aim of this paper is to perform an environmental scan of Sapienza libraries, their services and staff, with a view to contributing to the definition of a standard for the profession and establishing a competency profile for the academic librarian in Italy.

This is particularly relevant at a time when the academic library is constantly challenged to remain a vital part of their research and learning communities and meet their evolving needs. As the amount of content created and acquired in electronic format continues to increase, establishing the knowledge, skills and new areas of expertise necessary for the job is essential. Emerging opportunities must be exploited to provide innovative, value-added services for the students and researchers, particularly as preparations for Horizon 2020 get underway.

Through a stakeholder assessment this study will first look at the top trends in the Sapienza library system. Then, by referring to a representative selection of libraries, establish a set of core competencies needed to transition the academic library into the future as well as establish a competency profile for the academic librarian.

**Keywords:** Academic librarians, Librarian profession, Sapienza University of Rome

## Demographic Change in "Old" Europe - What Does That Mean for European Libraries?

Simone Fühles-Ubach

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**Abstract:** The paper examines the implications of demographic change for libraries from multiple perspectives. The starting point here is the general political and economic perspective, which predicts a massive change in the population growth for different age groups in Germany by 2050. Based on this, an analysis of the environment will be developed, i.e. it comes to the question of what consequences service companies generally expect due to this general trend and which consequences must be specifically derived for libraries. It is both for the consideration of the changing target groups (age and size) as well as to necessary adjustments of library services and products. Finally, the

effects on the internal library level are addressed, i.e. aging and modification of library staff is examined in detail and requirements for library management are derived. A comprehensive assessment with recommendations for action concludes the analysis.

### Demographic Differences in Perceived Outcomes of U.S. Public Libraries

### Dr. Sei-Ching Joanna Sin, Nanyang Technological University, Singapore

**Abstract:** Although there are studies on the usage and importance of public library resources and services in the United States, few studies have examined the benefits that U.S. public libraries bring to the nation's population. To address this gap, the current study surveyed over 1,000 U.S. adults nationwide on how they perceive the outcomes of public libraries. This presentation will discuss the findings on perceived outcomes in different aspects of life, such as in education, work, everyday activities, and leisure. It will also examine the demographic differences in perceived outcomes and explore the implications of these findings on U.S. public library service provision.

Keywords: Public libraries, Outcomes, United States, Survey

### Descriptive-Analytical Study of Talking Books in Iranian National Bibliography Database

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<sup>2</sup>MA of LIS, Expert of Non-book Resources Section of National Library and Archives of Iran (NLAI), Iran

#### Abstract:

**Purpose:** This study shows bibliographic descriptive-analytical examination on talking books with the two indicators production year and subject.

**Statistical society:** The statistical society of this research is 1821 records of talking books (sound tape) in the National Bibliography Database of Iran.

**Methodology:** In this study, library and survey methods have been used. To gather information and determine the frequency, two check lists and for the statistical analysis descriptive statistics were used. Statistical data in this study by the use of the advanced search and Boolean operators in the comprehensive software of library and archive of Iran (RASA) are obtained.

**Conclusion:** As a result the collection of talking books at the NLAI is not up to date literature on the Language and Literature subject one have a better situation among the others. This result reveals to pay more attention for better future planning and NLAI activities for acquisition in the other topics as well.

**Keywords:** Talking books, Cataloging, Indexing, Iranian National Bibliography Database, National Library and Archives of IR of Iran (NLAI)

### Design-Build as a Research Collection Development Methodology

#### Kenneth-Roy Bonin

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Abstract: Quantitative analyses confirming that the greater percentage of academic library collections attracts minimal significant use or none, demand a better coordination of library resources with research and teaching. Adopting the designation and practice originally introduced in architecture and construction as design-build, and later adapted as design-build-run in computer software development, integrates curriculum and collection development. It is applicable if teaching and research occur on-site or on-line, and whether supporting collections are maintained physically or virtually through electronic means. Traditional research collection development employs a variety of criteria, frequently qualitative, but sometimes comparative, attempting to achieve comprehensive or even exhaustive coverage of designated subject areas or entire disciplines. Although always selective, but particularly in periods of economic constraint, acquisitions are usually limited by more stringent policies, giving priority to faculty requests and balancing ownership with access. Neither actually guarantees use of the titles obtained. As illustrated by the acquisition and accession of the Canadian Policy Research Network document collection, the concerted curriculum and collection development efforts of a design-build strategy can secure superior results, surpassing the assurances of either 'just in case' or 'just in time' models. Although presented as an example, it would be relevant to any large-scale collection acquisition. Essential considerations include credible curriculum design and research expertise, although this may be generic rather than subject-specific, and a proactive as opposed to reactive approach. Advantages indicate positive partnership, team-building and student mentorship opportunities. It also encourages research proposals, and promotes interdisciplinarity and inclusivity over exclusivity in the acceptance of potential collection donations.

**Keywords:** Collection development, Curriculum design, Design-build, Library use, Academic Libraries

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# Designing a Focused Assessment Strategy for Your Library Marwin Britto, Ph.D., MLIS

Associate Dean, University Library, University of Saskatchewan, Canada

**Abstract:** Libraries are often challenged with connecting and making sense of the various assessment activities which occur within their context. How do they all fit together? What types of data should the library collect? Why? How often? How should data be analyzed and how can this analysis then be made actionable? What data should no longer be collected? Creating an assessment framework aligned with a focused assessment strategy builds the necessary infrastructure to be able to effectively address these types of questions. This presentation examines one academic library's journey to design an assessment framework and strategy to coordinate and streamline our assessment activities. We hope by sharing our challenges and opportunities in these processes, our libraries can benefit from our experiences.

### Development of the Legal Deposit of Digital Copies of Printed Materials (electronic publication) in Serbia

#### Nemanja Kalezic

Head of Legal Deposit Department, National Library of Serbia, Serbia

**Abstract:** Libraries are in constant need to modernize their daily work in order to meet the challenges that new technologies are putting before them. This gave the idea to the library professionals from the National Library of Serbia, to propose new law in order to start collecting digital copies of printed publications, in addition to collecting the legal deposit of printed material. These digital copies of printed publications of the legal deposit are files in the pre-print form, conforming to the international standards for universal access to information. Serbian legislation defines this form of publications as a type of electronic publications.

The Legal Deposit of Publication Law (2011) obligates deposit libraries in Serbia to collect and preserve digital copies of all printed publications published in the Republic of Serbia. Basic motives which led librarians to suggest such legal solution are numerous. First, libraries will no longer be obliged to digitalize materials, since they will already be in digital form. Secondly, it will be possible for the blind or visually disabled persons to use current publishing on the specialized devices. Nonetheless, it gives all of the users the possibility of full text search of the big text corpus. Also, non-commercial publishers will have opportunity to make their materials available to the users via public domain.

First publications were stored in early November 2011 in accordance with the Book of Regulations for Delivery and Usage of Electronic Publications of the Legal Deposit in the Deposit Libraries (2011). According to the current book of regulations publishers provide material in PDF format.

Special software has been developed to enable publishers to upload their digital copy on server of the National Library of Serbia. In the December 2012 second version of

application was developed in cooperation with the Institute of Physics, Belgrade (IPB) in which each publisher gets its own account for which it has liability to upload their file, creating metadata (title, author, ISBN, ID of the record for printed version etc.) and choose one out of three given options for visibility:

- to store it on an off-line servers, without possibility for access to the publication (so called dark archive),
- to store it with possibility of access to the publication only in the premises of the deposit libraries.
- to store it with the possibility of Open Access to the publication via the Internet.

After uploading PDF files are converted to .JPEG format, chosen for the purpose of the public display. In the spring 2014 we expect to create ELINKS.SR database which will allow public access and search. The security of PDF files and copyright issue is given special attention. By now more than 60.000 copies are collected and converted most of which are periodical issues. Major commercial publishers often choose dark archive option (around 87%), unlike nonprofit publishers and self-published authors which choose Open Access option. Public domain of this service is available on address <a href="https://www.obavezni.nb.rs">www.obavezni.nb.rs</a>

# Dictionary-based Product Name Recognition in Patents Hong-Woo Chun

Korea Institute of Science and Technology Information, Korea

**Abstract:** This paper aim to recognize product names in patents using Natural Language Processing (NLP) technique. NLP technique is popularly used to extract information from literature. To recognize product names, US Trademark DB is used to construct product dictionary. The dictionary-based longest matching and similarity-based product name recognition have been executed. The experimental results showed an encouraging performance.

### Digital Preservation of Information Resources in Academic Libraries in Nigeria

#### Attahiru Saminu

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**Abstract:** The world is witnessing a rapid and progressive transformation as a result of IT revolution, which has predominated all aspect of societal development. One of such transformation has manifested in the form of digital libraries. The evolution of digital libraries has ensured the emergence of global networked environment that has dramatically changed the face of libraries, their functions, services as well as their storage and delivery system. One of such services is digital preservation, which is the work needed to ensure that digital content is maintained and accessible into the future use. This paper intends to examine the status of digital preservation of information

resources in Academic libraries, its benefit, challenges and prospects in Nigerian perspective.

**Keywords:** Digitization, Digital Preservation, Information Resources, Challenges, Academic Libraries

#### Digitized Historical Sources in Teaching- digital Library Veliki rat

#### Ognjen Kovačević

National Library of Serbia, Legal Deposit Department, Serbia

**Abstract:** The new era in technology development which came with internet reflected to all areas of everyday life and also to teaching. Advantage of easy and fast communication, usage of different online material became very important and inevitable in History teaching process. However if we look back to the process of developing different forms of teaching tools and materials from plain textbooks, blackboards, pictures, maps, movies etc. history teaching process went towards one goal-learning based on the examples. This need for correct examples, which could be used in teaching, began to be fulfilled when history sources digitization started.

Internet based sources are very important when teaching, studying or researching about different history themes. Though, while using this type of internet accessible sources in teaching we meet so many obstacles and problems.

There is a problem concerning teachers and pupils, and that is dispersion of sources on the Internet as well as incomplete, non-existent, or incorrect explanations, so often provided by unqualified persons. If that is the case, the teachers who use the sources which are Internet accessible have the problems of locating, checking and collecting of correct sources which waste the time and create increasing instability during the work. On the other hand, the pupils are not motivated to use the sources they can find online because their teachers constantly warn them about the necessity of checking any material available. That is the reason why pupils lose confidence in such a way of researching or learning which, of course, may be usable only if properly prepared.

The necessities of teachers and pupils are therefore identical. Regarding the source, they both want correct, complete and reliable information which means they need the place where they can find such materials easily in order to use them for teaching or further research. Educational portals offer such a possibility because they gather at one place all digitized materials related to a certain topic or a period. Digital library "veliki rat" (Great War) (http://velikirat.nb.rs/), which was created by National library of Serbia, or other similar portals, comply with such requirements. In order to meet these requirements, it is necessary that professional historians and librarians arrange these historical sources first. Then their reliability will be out of question at any given moment (http://velikirat.nb.rs/en/learning).

However, to use these portals for teaching or learning, it is necessary to pay attention to providing additional and useful materials good for arousing the users and their interest and suitable for further simplification of the usage of digitalized historical sources. This type of portal offers instructions how to organize workshops, reminder notes concerning internal and external critics of the sources, lecture plans and programs prepared in accordance with this type of work, and officially approved teaching standards which is

big help to the teachers . As for the pupils, this kind of educative portal can offer work without the fear of incorrect or incomplete data related to the material and all in accordance with particular themes or interests. To make the pupils more interested in educational portals and to keep them interested in researching the sources, it is extremely important that they are provided with various didactic materials made in accordance with their age, i.e., various quizzes, educational games, battle reviews, and many other topics that could attract their attention.

## Digital Libraries as a Test Bed for Evaluating the Effectiveness of Information Searching in OCR-processed Texts

Mirosław Górny, John Catlow, Rafał Lewandowski

Adam Mickiewicz University, Poland

**Abstract:** The aim of this paper is to point out certain weaknesses of OCR with regard to the problem of information searching, and to describe the mechanisms involved. A methodology is presented for evaluating the effectiveness of information searching in OCR-processed texts. It is also shown to what extent relying exclusively on OCR techniques limits the possibilities of obtaining information from texts. It is indicated how and at what costs these limitations can be overcome by the use of keywords entered by a cataloguer. The research was conducted based on the resources and users of the Digital Library of Wielkopolska.

### Discovering Southeast Asia: An Assessment of Major Southeast Asian Studies Collections in the United States

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Abstract: Southeast Asian Studies (SEAS) is a young discipline. Though scholars have studied specific countries in what is now Southeast Asia (the area south of China and east of India) for a longer period of time, most of the major SEAS programs and centers in the United States were not established until the 1960s. Consequently, there are only about a dozen libraries with comprehensive SEAS collections in the US. With so few major collections, all of which have experienced budget decreases, it is imperative to begin thinking about collaborative collection development in order to ensure that a wide breadth of research materials is available nationally to support the research needs of SEAS scholars. Through a comparative assessment and collection analysis of these collections, this research provides the necessary data to assist in the formulation of such a shared collection strategy. Using both quantitative (collection analysis tools) and qualitative (surveys and interviews) methods, it reveals the scope and depth of these collections, providing not only basic collection figures but also information about strengths and weaknesses, unique collections, and initiatives.

**Keywords:** Southeast Asian Studies, Collection analysis, Assessment, Library collections, United States, Collaborative Collection development

### Dublin Core Metadata Standards for the Rare Manuscript Collection of India

#### Maltesh Motebennur

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Abstract: The present paper emphasises on Dublin Core Metadata standards for the rare Manuscript collection of India. India has a treasure house of very rare collection of manuscripts of Arabic, Persian, Sanskrit, Pali, Mahāyan and Theravād Buddhist manuscripts on various forms such as palm leaves, handmade paper, Sanchi Pat etc. National Mission for Manuscripts (NMM) developed state-of-the art software, Manus Granthavali based on the Dublin Core Metadata Standards that are globally accepted and used in libraries everywhere, for the digital preservation of such rare manuscript collection of India. Different file format for the retrieval has been discussed in depth in this paper. As researcher taken pilot project to digitise rare Mahāyan Buddhist manuscripts of Tawang Monastery, second largest monastery in Asia, and digital preservation of these manuscripts for the future generation has been suggested.

**Keywords:** Manuscript, Dublin Core Metadata, National Mission for Manuscripts, Arabic and Persian Manuscripts, Buddhist Manuscripts, Mahāyan Buddhist Manuscripts

# Eat, Rest, Work: A Case Study of Four Academic Libraries Irene Lopatovska<sup>1</sup> and Mariana Regalado<sup>2</sup>

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As the number of academic digital collections and specific tools for accessing digital content increases, we examined whether students are still using library spaces to conduct research and prepare for courses. For the study, we collaborate with four colleges in a greater New York City area and conducted several observations in the public areas of these institutions' academic libraries. In addition to observations, we conducted on-site semi-structured interviews with students, and collected information about specific projects and academic tasks students were working on in the library, the type of information resources and technology they used to access content required for their academic projects, levels of satisfaction with these resources and technology, as well as

specific services available through their academic library. We observed library spaces at different times of the day and days of the week, and always noted a high number of students being involved in a wide variety of activities directly related to students' academic tasks, including reading print and digital materials, writing, working with a variety of media (e.g. books, iPads, mobile phone, laptops), interact with librarians. We also observed students using library spaces to rest, eat, socialize with other students, and engage in other types of activities not directly connected to their academic tasks. This observation is supported by the literature exploring the coexistence of social and learning cultures within academic library spaces (Gayton, 2008). Overall, we found that students were satisfied with the resources and services offered by their academic libraries. Most of the interviewees identified a strong preference for working with print media due to decreased eyestrain (compare to digital media), ease of highlighting and annotating texts (even in library books); in some cases, when students needed make print content portable, they made print copies or photographs of the content on their mobile phones for future use. Similarities and differences between the four academic libraries affiliated with different types of colleges (private/public; variations in students' demographic characteristics and disciplinary composition), are also discussed.

Keywords: Human information behaviour, Information use, Reading practices, Academic libraries, Library space, Technology adoption
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# The Effect of Teacher and Teacher-librarian Collaboration on Fifth Graders' Reading Motivation and Reading Comprehension

#### Hai-Hon Chen

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**Abstract:** This study investigates the collaborations between the content area of social studies teacher and school teacher-librarian impact fifth graders on reading motivation and reading comprehension. Following quasi-experimental method, six classes of elementary school fifth graders from one school of Kaohsiung city and two schools of Tainan city are used as samples. Eighty-four students of the experimental group are taught by teacher and teacher-librarian, while 85 students of the controlled group are taught by teacher in traditional instruction. The experimental instruction intervention will last for twelve to fourteen weeks. 'Reading Motivation Inventory' and 'Reading Comprehension Test' are used as instruments to collect data. T-test and ANCOVA are used to analyze the data. Results will indicate separately.

**Keywords:** Teacher and teacher-librarian collaboration, Reading comprehension, Reading comprehension strategy use, Reading motivation

### Engaging Library Users through Mobile Applications: BookMyne and Social Media

#### Mohd Faizal Hamzah & Zanaria Saupi Udin

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**Abstract:** Engaging users is one of the issues that need to be addressed to keep librarians and libraries relevant in this digital age. Since the mid-1990s, the expectations and behavior of library users have been undergoing a major change (Sadeh, 2007). According to Malathy and Kantha (2013), for the past few decades, libraries have adopted ICT and passed through developmental stages like automated house-keeping operations, providing faster access to its collection and digitization to provide multiple accesses for desktop users. Technologies have now changed the way librarians deliver information to their targeted users. Traditional ways in delivering information service are now deemed ineffective to cater to the needs of the digital natives. The University of Malaya Library (UML) is currently primed ahead with a mixture of strategies and new initiatives to stay in touch with their users. Throughout the years, UML has developed and refined various initiatives to engage ourselves with the users. The initiatives may take the form of refurbishment of the library to create learning spaces, personalization of websites, mobile applications which allow for access to real time information services, deployment of social media and creative content development. Mobile devices applications are becoming an integral part of everyday life and are changing the way one connects and interacts with the world. Smart phones, tablet and many more mobile devices are taking prominence. These changes are also changing the information retrieval behavior of our users. Users, especially generation X and Y are relying on mobile application/devices in their daily lives. Resulting from this, UML has taken the initiative to embed library services by utilizing BookMyne, Twitter and Facebook. As we all know, mobile technology allows users for web and app-based options in accessing information. BookMyne, Twitter and Facebook help the library to engage users besides optimizing this technology as research tools and for research purposes. This paper studies the effectiveness of mobile technology in engaging library users.

Keywords: University of Malaya Library, Mobile technology, Library service

# An Ethnographic Study of Male Juvenile Delinquents' Information Needs in Malaysia

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**Abstract:** The transition from childhood to be an adult is a very complex and confusing for young people. They will be exposing and deceive with things around them. Based on a report from the Policy Branch/Crime Prevention, Public Affairs Department, Bukit Aman, in Malaysia today, a juvenile is likely to be involved in various social ills and serious crime. Statistics showed that in 2013, the percentage of juveniles involved in crime was 0.5% for those aged 15 years, 2.2% and 4.1% for those aged 16 and 17 respectively. 18 year old juvenile delinquents increased to 15.2%, 19 year olds to 29.3% and 20 year olds to 49.2%. The number increased after the juveniles completed their schooling and therefore the increase in crime among juveniles may be due to the lack of parental control when the juveniles complete their school days. This study is using an ethnography approach. This approach is suitable in the prison environment. The fieldwork is selected as the medium to gather data in the setting where the participants are located and where their shared pattern can be studied. The ethnography approach in this study employs two (2) kinds of data collection: qualitative interviews and participation / observation session. The quota sampling is used; which the researcher identified general categories into which people will be selected. The study involved only a few participants from a population of 2010 juvenile delinquents at the Integrity School and Henry Gurney School, Malaysian Prison Department.

Keywords: Juvenile delinquents, Information needs, Ethnography study

### **Evaluating the Impact of Collaboration on Student Learning, Library Collections, and the Role of the Liaison Librarian**

#### Jordan Nielsen

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Abstract: In the spring of 2013, the business librarian and the Global Engagement Office at the University of Arkansas began working on a language learning project for students in the Sam M. Walton College of Business. This project was targeted at business students enrolled in study abroad programs, students majoring or minoring in international business, and other business students interested in enhancing their foreign language skills. The collaboration between the business librarian and the Global Engagement Office resulted in the creation of a certificate of completion program. The program gives the students an opportunity to earn a certificate by using a language learning tool provided by the University Libraries. The certificate is granted after students have completed all of the lessons in a language, spent a minimum number of hours studying the language, and completed a survey about their experiences. The certificate program has evolved since its creation, and in the spring of 2014 at least one study abroad program will require students to complete it prior to traveling abroad. This presentation will describe the collaborative process that led to the creation of the certificate program, and it will also include a discussion of the survey responses provided by the students who completed the program. Finally, the evolution of the program and its impact on collection development decisions in the University Libraries will be discussed.

**Keywords:** Academic library, Collaboration, Collection development, Language learning, Liaison librarian

### Evaluating the Quality of News Information: The Rise of Citizen Journalists, the Question of Credibility, the Erasure of History and the Role of the Library

#### Marydee Ojala

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**Abstract:** There is a new era when it comes to news research. Internationally, historical newspapers are being digitized, which is of enormous significance for researchers, but recent news is more problematic. Citizen journalists are dominating the "airwaves" of Twitter, Facebook, and other social media. Hyperlocal news outlets encourage reporting by local citizens rather than trained journalists. The allure of breaking news on social media equates to an ever-changing set of facts as the actual situation becomes clearer. At the same time, mainstream news outlets are embracing social media, encouraging journalists to engage with the readership, but not necessarily including journalists' social media activities in their archives. In terms of format, newspapers and news magazines are increasingly publishing in electronic form only.

The credibility of news sources is enhanced by the increased presence of mainstream media outlets on social media. Not only do media companies maintain a presence on Twitter and Facebook, but most have a YouTube channel as well. The ability to let everyone tag photos in social media, whether with the correct names or not, can spread misinformation and lead to misidentifying individuals. The internet is replete with hoax sites, parody sites, biased information, and misunderstood terminology. The preservation of tweets, status updates, and channels is questionable. What happens when a social media company goes out of business, is acquired by another company, and/or takes down its website?

Concerns about privacy affect the digitization of news. There is a collision between the individual's right to privacy and the public's right to know that can lead to information disappearing. Reports of arrest records, particularly of minors, and the publication online of "mug shots," photos of people arrested but not convicted, raise many ethical issues. Recent legislation worldwide could result in personal and corporate information being erased from news sources and unavailable to the next generation of researchers.

The growing influence of social media on news production and consumption has implications for news preservation and library research. Research patterns are changing to reflect a greater reliance on social media. Not only do people find information through referrals by their social networks, but also the web search engines are incorporating social network recommendations and search behaviors in the delivery of search results, sometimes to the exclusion of the library community. As technology changes and the ability to create and report on news is within the range of just about everybody, critical thinking, media literacy, and new approaches to promoting content become crucial information professional skills.

Keywords: News research, Evaluation, Information professionals, Digitization

# **Evaluation of the Brazilian Capes Portal of E-Journals: An Analysis of Users Barriers and Problems**

#### Nádia Ameno Ribeiro and Beatriz Valadares Cendón

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Abstract: The present research focused on evaluating the barriers found by faculty users upon searching for information in the CAPES Portal of E-Journals. The CAPES Portal of E-Journals, created in Brazil in 2000, offers more than 35 thousand scientific journals and close to 130 reference data bases in all areas of knowledge, among other resources and is considered the largest of its type in Latin America. The faculty selected for carrying out this research, were scattered throughout 17 federal Brazilian universities from the 5 geographic regions of the country. The data was collected by means of a websurvey which used a methodology, which was mainly quantitative with some qualitative data. Four questionnaires were used, containing a total of 71 questions. The current study relates the results obtained for one of the open questions of this questionnaire which asked on the main barriers and problems to use the Portal. For the qualitative analysis of the data, content analysis was used to create categories which described the content of the messages in a critical manner. For the question analyzed 3,684 comments were received from the respondents. Out of these, 1,511 (41% of the comments) were selected for analysis because they were related to the difficulties the respondents had upon searching the CAPES Portal of E-Journals. The 1,511 comments were subdivided into 12 initial categories, which were regrouped into three main categories according to their content similarity: (1) Personal Aspects; (2) Technical Aspects of the System; (3) Institutional Aspects. The analysis revealed that category (2), Technical Aspects, concentrated the greatest part of the comments (52%), while category (3), Institutional Aspects obtained 38% of the comments, and the category with the smallest number of de comments was (1), Personal Aspects with 10% of the comments. The personal factors (category 1) which the users mentioned were responsible for their difficulties in utilizing the Portal were individual characteristics such as education, experience, ability and knowledge. The institutional factors (category 3) pointed by the respondents were related to the Portal's maintenaining institution (CAPES), and the accredited institutions which give access to the users, and which, in the context of the present research are the federal universities. In this category were the institutional infrastructure and its lack of adequacy, specifically in that which is related to the speed of the connection, the availability and adequacy of the equipment, such as, for example, computers, printers, and updated software, besides the inadequacy or lack of training activities and the spreading of the CAPES Portal. The aspects pointed out by the users as technical factors (category 2) causing difficulties for access and search of the Portal included the availability of the information, problems the usability of the interface and other technical aspects.

**Keywords:** Evaluation of digital libraries, E-journals, Information searching, User study, Web-survey

### **Evaluation of the Librarian-Educator`s Training Conceptual Model**

#### Vincas Grigas

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**Abstract:** The aim of the research is to evaluate the validity of the conceptual model of librarian-educator's training in real environment and to propose practical application of the model in the university study programme aimed at the training of professional librarians. The validity assessment methodology of the conceptual model is based on D. L. Kirkpatrick's Four-level Evaluation Model (Kirkpatrick, 2005). Validity of the conceptual model is assessed through action research analysing two groups - the main intervention group and experimental group.

The following methods of statistical analysis were employed for the processing of the said data: Kendalls's Tau-b- for the calculation of rank correlation coefficients; Independent-samples T-test - for comparison of the means between two unrelated samples; Levene's Test - for the assessment of the equality of variances for a variable; Paired-samples T-test - for the measuring of the difference between subscales in statistically meaningful means. The conceptual model was tested in real environment at the Faculty of Communication of Vilnius University within the framework of the study programme aimed at the training of professional librarians-educators. The model was tested twice: the initial test was executed in the autumn semester of 2011-2012 and the principle test was completed in the autumn semester of 2012-2013.

The evaluation of the model was conducted through the implementation of action research in the course of which 4th year students from Library and Information study programme who attended the course Methodology for Information Literacy Training produced an 8-academic-hour course Information Literacy and delivered it to 1st year students. Within the framework of the action research quantitative and qualitative data of 4th year students' self-examination were collected, including those on preparation of the course, teaching results, feedback from students, achievements of students, changes in competences and assessment from experts who monitored the implementation.

Research findings revealed that after the course on the Methodology for Information Literacy Training, 4th year students rated their professional competences as librarians-educators much higher, feedback from students was mainly positive, information literacy skills of course attendees increased and the assessment from experts who monitored the execution of the course was also favourable. The improvement of results in the first test session was lower than that in the second test. The methodology of model implementation was slightly adjusted after the first test which helped achieve better results after the re-implementation. This allows the conclusion that the framed conceptual model is appropriate for the training of librarians-educators.

### Evidence Based Service Change: Remodeling the Academic Libraries for the Digital Era

#### Markku Laitinen<sup>1</sup> and Jarmo Saarti<sup>2</sup>

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**Abstract:** During the past couple of decades, the university libraries have changed their paradigm from collection based services towards promoting the access and digital use of scientific resources. At the same time, the evidence based library management techniques have been discussed widely. The need for adapting to the rapidly changing operational environment has meant also for the library management a change towards a more professional manner of making strategic and at the same time economically and professionally efficient decisions. Our paper examines the role of the library statistics as a basis for evidence based library service redesign in one Finnish academic library. A special emphasis is put on the trend analyses and the manner of representing statistical data to the decision makers and to the (inter)national level co-operation in the analysis and gathering of the statistics.

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Academic Libraries in Germany. *Performance measurement and metrics* 10(2):116 – 121.

## An Examination of Health Information Service Provision at Federal Medical Center, Katsina

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Abstract: This paper examined the Health information service provision at federal medical center, Katsina. The main objectives of this study are to examine the sources of information at the centre and to identify the types of information resources available. Other objectives of the study were to determine the users of information resources and services at the center. A qualitative research method was used in carrying out this study. Interview was used as research instrument for data collection. The population of this study was medical doctors, nurses and midwives, pharmacist, laboratory technicians and scientists and radiologists. Two participants were selected from each of these groups, making a total of sixteen (16) participants which formed the sample size for this study. The findings of this study have shown that the sources of information resources at the center were mainly from the library, flairs from pharmaceutical companies, professional bodies, internet services, reports, conference proceedings, workshops and seminars. Also, the findings showed that the information services provided at the center were selective dissemination of information (SDI), current awareness services (CAS), Reference services, information searching, referral library services and library user education etc. The paper articulated some of the major factors that militate against effective health information service provision at the center which revolved around inadequate information service providers, lack of effective and virile library services, inadequate internet and ICT facilities, erratic power supply and poor health record management system. Finally, the paper recommended that the library of the centre should be well equipped with adequate human and material resources, there should an effective internet services and other required ICT facilities. It is also recommended that an alternative power supply should be provided. There should be a good health record management system among others.

### **Exploring the Academic Libraries' Role in Research Data Management**

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**Abstract:** The management of research data has received extensive attention in the last decade, with many arguing that academic libraries are in a good position to implement such services to support the research process at universities. By applying a mixed method approach, using questionnaires and semi-structured interviews as data collection techniques, this study aimed to discover the capacity and readiness of some academic libraries in Estonia and Hungary, countries where research data management practices are only starting to emerge.

Keywords: Research data management, Data curation, Academic libraries, Master thesis

# **Exploring the Role of Unconscious Influences in Information Behavior Using Projective Techniques**

Kendra S. Albright

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Abstract:

#### Introduction

Complex emotional and cognitive processes occur at a level outside of conscious awareness and affect how humans behave, think, and feel. According to psychoanalytic theory, these unconscious processes keep unwanted thoughts from entering consciousness through the use of defense mechanisms whose purpose is to protect the individual from painful emotions and thoughts. Psychologists have suggested that as much as 85-95% of decision making occurs outside our conscious awareness (see for example, Weston, 2007; Pervin & John, 2001). Library and Information Science has historically viewed information from a cognitive perspective. Because of the influence of the unconscious on our daily decisions, it is important to expand our understanding of how these unconscious processes play a role in information behavior.

#### Argument

Studying the ways in which unconscious processes affect information Behavior, however, presents a methodological problem, namely how to delve beneath the surface and access user's unspoken feelings, perceptions, and attitudes. Projective tests are commonly used in psychology through tests where a subject 'projects' his or her personality onto a given object or situation. Through this projection, they reveal their own inner thoughts and feelings through indirect means, allowing access to a person's unconscious. This paper explains how projective techniques may be used to explore the role of the unconscious in information behavior.

#### Conclusions

The use of projective tests in information Behavior research has potential for accessing and understanding users' unconscious thoughts and feelings that are helpful to solve information problems.

**Keywords:** Psychodynamic psychoanalytic theory, Projective tests, Information behavior

#### Facing Internet Filtering: A Challenge for the Library

### Jonathan Hernández Pérez, PhD Student, Library and Information Studies, National Autonomous University of Mexico

**Abstract:** Since the Internet came to the fore of public attention, debates around regulation of Internet content have become increasingly common around the world. Internet is a medium that contributes free access to information, by enabling thousands of people learn, communicate, share their ideas and make changes in their societies, but this freedom of access to information can be interrupted through the use of filtering and blocking software which attempt to block access to web sites with content such as pornography, hate speech, violence, racists or other materials that may be considered objectionable to governments or private. This paper provides a conceptual framework about this special threat against free access to information by highlighting its consequences on the library field.

Keywords: Internet filtering, Censorship, Libraries, Access to information, Information policy

# Finding Metaphors for Academic Library Website Design Ming-Hsin Phoebe Chiu

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Abstract: Internet has changed the way people acquire and consume information. In the academic setting, students turn to the library website in the stead of visiting the library for their information needs. Using metaphor in the design of library website creates a resemblance that is grounded visually, sensorily, psychologically, and conceptually on the physical library. In this study, a series of search tasks were designed to engage thirty graduate and undergraduate students, in interacting with various library services. Each participant was given a list of six items, three for physical collections, and another three for digital collections or online services. The participant was asked to search and locate the items to complete the process. After the search tasks session, in-depth interview was followed by. Three research themes were probed: (1) What characterizes a physical space as a library? (2) What characterizes an online space as an academic library website? (3) What elements of a library website are related to physical library elements? The metaphor elicitation process allowed the participants to recall what they just experienced in the searching tasks and to offer analogies to connect the website materials to the real world. Meanwhile, the researchers were able to establish mapped relationship between the source and target of the metaphor.

The findings identified four types of library metaphors that may be applied to library website design. Organizational metaphor, like elevator, can be applied as navigation guides in the library homepage. Functional metaphor, such as browsing the collection through bookshelves with friends, can be designed as browsing the digital items checked out by users with similar reading interests. Visual metaphor, such as color of the furniture, can be coordinated with color scheme of the library website. Content-based metaphor is primarily textual, for example, the word "book" appears everywhere in the library website.

**Keywords:** Metaphors, Library Website, Physical Library, Library Website, Website Design

### A Framework to Evaluate Diversity Representation on Academic Library Websites in State Universities in the United States: An Exploratory Study

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**Abstract:** This paper presents a holistic framework to evaluate diversity representation on academic library websites in the 50 state universities in the United States. It fills the gap in a lack of comprehensive and systematic approach to do justice to the topic of diversity (Mehra, Olson, and Ahmad, 2011). Current limited efforts need to go beyond lip-service (Mehra and Stepp, 2005) and their use of the term as a mere buzzword to provide meaningful and valuable information and take concrete actions in support of all categories of people (Mehra, 2011; Roy, 2001). There is no common agreement on the

best way to accomplish representation of diversity (Kajberg and Lørring, 2005) and scholars have critiqued the web representations of diversity-related information as limited and fragmented, in addition to their piece-meal approach towards representing diversity-related information in only one form or the other within the myriad range of diversity of stakeholders associated with the academy and their information needs that exist (Mehra, B., Allard, S., Qayyum, M. A., and Barclay-McLaughlin, 2008). The task, of course, is not an easy matter and including diversity-related information can be a difficult and delicate task (Abdullahi and Kajberg, 2004) further complicated by a digital environment (Liu, 2005; Villar, 2006).

Seven elements demarcated under information sources, information policy, and making connections are examined in nine categories of diversity representation that include: age, disabilities, educational level differences, gender and women's issues, international communities, lesbian, gay, bisexual, transgendered (LGBT) populations, local/regional dimensions, racial/ethnic categories, and religion. The following are the seven elements in the proposed framework: (1) Information Sources — 1A. Collections (e.g., print and electronic, monographs and periodicals, web portals, exhibits); 1B. Resources (e.g., databases and print indexes, research guides, funding opportunities, paid work opportunities). (2) Information Policy and Planning — 2A. Diversity committee (e.g., identification of committee's contact information); 2B. Diversity representation (e.g., diversity statement, inclusion in strategic plan). (3) Connections [External and Internal] 3A. Centers and organizations, academic departments and offices (e.g., physical and/or intellectual access to internal agencies and units in the university that provide diversity services); 3B. Community engagement (e.g., connections to external community-based diversity agencies); 3C. News and upcoming events [within the past one year] (e.g., information on internal/external activities and events).

Exploratory content analysis of the websites identifies select strategies in representation of diversity-related information for each of the seven elements to establish an initial discussion of best practices and adoption of possible future standards. The proposed framework identifies an encompassing approach to address gaps in existing strategies that provide a piece-meal and fragmentary analysis towards evaluating and assessing web representation of diversity in academic libraries and other work environments.

**Keywords:** Diversity, Academic Library, Website, Content Analysis, United States **References** 

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### Freelance Librarianship in Nigeria: An Imperative in a Period of Economic Recession

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Abstract: The main objective of the study is to determine the possibility of a selfemployed librarian (freelance librarian) surviving in the Nigerian economy bedeviled by recession. A survey method was adopted for the study, involving purposive sample of 60 accessible librarians working in 17 libraries in Enugu East and West senatorial zones of Enugu State. Five research objectives guided the study. They are: 1. To ascertain the reasons for people becoming self-employed. 2. To ascertain the attributes of a freelance librarian. 3. To identify the business opportunities open to a freelance librarian. 4. To identify the appropriate academic qualifications and skills required to be a successful freelance librarian. 5. To identify the sources of fund available to a freelance librarian. The findings from the study indicated that there are five major reasons that propel individuals to establish businesses. There are six major attributes of a freelance librarian. Three business opportunities (e.g. information production, organisation, and retrieval) are open to a freelance librarian. To enable him succeed, he needs to obtain a degree or Higher National Diploma (HND) in librarianship, plus some knowledge of Accounting and Marketing and some skills in printing and use of the computer. Finally, four major sources of fund are available to a freelance librarian.

## Global Warming: India's Response and Role of Information Professionals

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**Abstract:** Environment degradation is a global issue because 'environment' is such a context which cannot be restricted to geographical boundaries. Amidst globalization of the issue of environmental degradation, its acute state in India cannot be ignored. India's environmental problems are gaining global significance because of the rapid and offensive speed of urbanization and lack of infrastructure. Increasing urbanization, industrialization, deforestation and transportation as the other cousins of economic development put tremendous pressure on natural resources, and, therefore, there is a pressing need to strike a balance between development planning and urgency to safeguard the environment (Kewlani and Sharma 2009). The Paper highlights India's Response and role of Information Professionals in Global Warming and discusses Environmental education and Environmental Law and the Indian Judiciary.

**Keywords:** Climate change, Environmental awareness, Global Warming, Role of information profession, Environment degradation, Environmental Education

### Good Practice in Access to Governmental Information (PAPIIT IN403113-RN403113)

#### Egbert J. Sánchez Vanderkast

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**Abstract:** Access to governmental information has been a key issue in the last decade in many countries. According to Braman, information should be seen as a constitutive force in society whose effects and impacts can shape societies by his flow and could have diverse effects and a considerable impact on current society. On the other hand the flow of governmental information should also promote a more democratic society through information transparency and information policy. The aim of this paper is to present the retrieving practice of reporters who mainly track the flow of information about environment and natural resources.

Method: a search will be made in four main Mexican newspapers to identify those reporters who write on environmental facts. They will be contacted.

A questionnaire will be hand out. This will be send by e-mail. A web-tool will be used to gather data. The results will presented and discussed.

**Keywords:** Governmental information, Access to information, Information policy, Environmental information, Democratic society, Information transparency

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## Guided Reading/Bibliotherapy/ in the Motivating Programmes of the Croatian Public Libraries

Ljiljana Sabljak<sup>1</sup>, Dunja Marija Gabriel<sup>2</sup>

**Abstract:** On these pages we are going to make a presentation of how Croatian libraries become helpers in literacy and how they help users with special needs who have difficulties in reading and writing to cope with their problem. They have provided a special social projects based on guided reading (bibliotherapy). "New literacy", the ability to read and write using multimedia, and to critically evaluate texts, is essential to prosper in an information and technology intensive world. This paper challenges this mainstream Concept of literacy by examining the socially-emotionaly-contextuolized nature of literacy, the strategies of coping and transitioning a cross diverse "discourse communities" or psycho-social contexts, and the types of literatures held by users with special needs in public libraries in Croatia. It concludes with strategic directions for delivering appropriate library services – "Right book for the right user in the right time".

# Has it Been Already Digitized? How to Find Information about Digitized Documents

#### Tomas Foltyn

Collection Management Division Director, National Library of Czech Republic, Czech Republic

**Abstract:** The Digitization Registry of the Czech Republic (http://www.registrdigitalizace.cz/rdcz/?language=en) is national project, which is developed in the close cooperation of the National Library of Czech Republic, Academy

<sup>&</sup>lt;sup>1</sup>City Library of Zagreb, Croatia

<sup>&</sup>lt;sup>2</sup>National and University Library in Zagreb, Croatia

of Sciences Library and private company Incad. The project's aim is to create national registry of digitized documents, which could help to the librarians to avoid unwanted duplicities and to enable sharing the digitization results across the Czech Republic. It is designed especially for the libraries or other memory institutions that digitize their collections. Because the system enables to avoid unwanted duplicities it can save financial resources used for scanning and subsequent processing and make the digitization more effective.

The system is fully based as web service. It is available both in Czech and English. It could provide information about the location of the original document, the location in digital library and library catalogues (including direct links to both systems), about the status of the process etc. The last information is very useful, because everyone knows immediately, whether the book was already digitized, it is in processing right now or any institution has chosen the document for digitization and will process it soon.

The system is based on RIII application framework (J2EE) and data are stored in a relational database Oracle. For user access search and retrieval FAST is used. All user accesses are implemented via web application. The Digitization Registry is independent on the operation system and is able to be adapted to various languages. The implementation team is working now on new release of the system (which could be available in the middle of the year), where new features connected with browsing, agendas and imports will be implemented.

Digitization Registry is connected to other important library systems – especially library catalogues and digital library Kramerius. Almost all the metadata (bibliographic records, links) are transferred automatically among them.

Nearly 130 000 unique records from more than 40 institutions across the Czech Republic are now available in the registry. This number is increasing continuously. Because of easy adaptation to other languages, independent technical background and ensured funding for the development there are no limits to use this solution also in abroad. Digitization Registry was awarded by INFORUM conference price 2010 for its benefit to the coordination of digitization activities in Czech Republic.

The proposed presentation will bring detailed information also about the future development connected to mass digitization and every day usage of the Digitization registry.

# Heyne Digital - Exploring the Origins of Classical Archaeology through a Digital Edition

#### Kristine Voigt, Christian Mahnke, Dr. Maike Tech, Zeki Mustafa Dogan

Georg-August-University, Göttingen State and University Library, Digital Library Department, Germany

**Abstract:** The project "Heyne Digital", funded by the Deutsche Forschungsgemeinschaft (DFG), explores the origins of archaeology as an academic discipline in the 18th century. The focal point is Christian Gottlob Heyne's eminent lecture "Über die Kunst der Antike" (About the Art in Antiquity), which he gave at the Georg-August-University in Göttingen, Germany. Already in his lifetime Heyne's lecture was regarded as a crucial step towards the establishment of archaeology as a systematic and structured academic discipline. Heyne did not leave any notes of his lecture, thus the lecture can only be

reconstructed by his students' notes. Göttingen Institute of Archaeology and Göttingen State and University Library will research the lecture in a close collaboration and make it accessible as a scholarly digital edition with various features.

In this paper we will present the requirements and specifications researchers raised for this scholarly digital edition and discuss the challenges as well as possible solutions.

Keywords: Digital edition, Archaeology, Digitalization, Full text, TEI

## The Historiography of Serbian and Canadian Libraries – Similarities, Differences and Peculiarities

Prof. Aleksandra Vranes, PhD

Dean of the Faculty of Philology, University of Belgrade, Serbia

Abstract: Historiography, as the study of history and methodology of history as a discipline, is an important pillar in observing the development of any scientific field. Library historiography, i.e. history of librarianship, represents the written history of people and movements that participated in the process of creation and modernization of libraries. Throughout this paper we will primarily consider the historiography of Serbian librarianship, from its beginnings in monasteries eight centuries ago and its establishment at the court of the ruling house of Nemanjić, to public libraries and reading rooms that were created out of the enthusiasm of citizens' associations and as a result of the national enlightenment fervor of 19th century, continue by giving an overview of Serbian libraries in 20th century, age that brought the desired democratization of knowledge and rapid expansion of public libraries, especially after the Second World war, and focus on the current state of Serbian libraries and librarianship in general. The legal framework, under which Serbian librarianship was created and is based upon, will also be one of the topics that will be discussed, from being partly mentioned as early as around 1220 in the St. Sava's Nomocanon, to the first real law defining the role of libraries and archives originating from 1881, and, finally, to more modern transitional forms dating from 1901 and 1960, and the current one from 1994.

Second part of this paper will explore the history of Canadian libraries, as well as suggest some of the similarities and differences between Serbian and Canadian libraries, with the special emphasis on the legal and social foundation of librarianship in both of these countries. Considering that the presence of Serbian Diaspora is significant in Canada, over eighty thousand Serbs live and work in that country, and that Canadian libraries were primarily created as vehicles for the transmission of European cultures and values, we intend to indicate the extent to which the Serbian culture and literature is nowadays represented in Canadian libraries. Finally, we will focus on the future role of libraries, in Serbia as well as in Canada, as educational and recreational centers with theme-oriented collections of non-book materials, video walls, "educational" cafeterias, etc., and on librarians as knowledge managers.

**Keywords:** Library, Historiography, History of Librarianship, Public Libraries, Reading Rooms, Serbia, Canada, Serbian Diaspora

### How the Potential Use of IS in Omani Organizations is Explored by a Mixed Method Approach

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**Abstract:** The use of information systems (IS) in organizations is usually fraught with threats and risks. In order to avoid the unsuccessful use of IS, there is a need to study the environment in which ISs are being adopted. A combination of methods has been used to pre-implementation of IS in the Omani Organizations in general and in the Banking sector in particular. Before collecting data, a process of devising lists of themes related to threats facing the adoption of IS in organizations, was implemented. This research approach helped researcher to explore such themes through two instruments: interviews with the top managers of organizations involved in research and distribution of questionnaires to customers of those organizations. Consequently, the mixed method approach comprised of qualitative and quantitative techniques was significantly employed to achieve findings that can facilitate the future adoption and use of information systems. Moreover, in this paper, this method was useful in addressing risks and threats linked to IS adoption in information-intensive organizations in the context of developing countries such as Oman.

**Keywords:** Information, Systems, Organizations, Oman, Qualitative, Quantitative, methods

#### How to Find what the Library Leaders Think?

Ane Landøy

University of Bergen Library, Norway and

#### Carl Gustav Johannsen

Royal School of Library and Information Science, University of Copenhagen, Denmark

**Abstract**: In this paper the authors will show how different methods, both quantitative and qualitative, may be used to explore library leaders' attitudes. The authors will discuss pros and cons of different methods, giving examples from their own research on Scandinavian library leaders through a decade.

Keywords: Library leadership, Methods, Scandinavia

### The Human Factors of Digital Libraries for Developing Digital National Library in Iran

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<sup>&</sup>lt;sup>2</sup>Master of Library and Information Science, National Library of Iran, Iran

#### Abstract:

**Introduction:** Development of information and communication technologies has caused libraries and information centers to try to have an appropriate level of readiness in the midst of this evolution in order to provide their information services in digital form in line with the needs of the new era. The aim of this study is to evaluate digital readiness of workforce in National Library of Iran in order to evaluate the human factors.

**Methodology:** The methodology used in this study was descriptive content analysis and survey. After reviewing the models existed in international, national, and institutional levels, and also factors discussed in the relevant literature, the indicators related to the needs and requirements of National Library were selected, and were reviewed and redesigned based on digital elements. Data were collected through questionnaire. Statistical population was all staff in Research, Technology and Planning Assistant, General Office of Technology and Communications, General Office of Digital Resources, and Research Groups that were involved, in some way, in the digital library of the organization (54 people).

**Results:** The results indicate that the skills and capabilities of digital librarians in National Library of Iran are not desirable.

Conclusion: Digital readiness of the workforce in National Library of Iran was less than the expected mean.

**Keywords:** Digital Readiness, Information and Communication Technology, Digital Library, National Library of Iran

### Identify the Underlying Factors Affecting in Formation Seeking Behavior of Users Interacting with the Visual Search Option in EBSCO Databases: A Grounded Theory Study

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#### **Abstract:**

**Introduction:** Information seeking is a behavior that there is interaction between searcher and information systems and this active interaction, and Occur in a real environment, which is known as background or contextual factors. In human interactions, decisions are strongly influenced by context. Therefore, users interact with information retrieval involve all aspects of the field - cognition, affect, and admitted that encompasses the interaction. Hence, this study investigated the factors influencing the formation of layers of context and its impact on the interaction of the user with an intuitive search option in EBSCO's information systems are dealing with.

**Methods:** Data's from 28 semi-structured interviews with graduate students and medical information librarians are collected and coded whit open, axial and selective way and using grounded theory approach, is analyzed.

**Results:** General classes of central ideas are made in this study include: features search, facility to display data: availability and usability of results, general features (personality, character) user, offering unique features (offering more options and the base plate) is available

**Discussion:** A review of literature, visual search and information-seeking behavior that many studies with regard to the underlying entity (place, person, or object), the need to

understand the reality of the underlying factors user interaction to improve web search deal. However, a review of the literature reveals that research on any aspect of the visual user interactions with search option and foremost need to understand the underlying factors that might have been, while the underlying factors affecting in order to improve visual search that utilizes the visual approach for improved understanding of information, is important.

Keywords: Context, Information Behavior, Visual Search, Ebsco

# The Image in a Book *Béla Lóránt Kovács*

Méliusz Juhász Péter Library, Hungary

Abstract: In my presentation I am looking for the answer to the question of how it is possible to find inside a library's database a book containing a certain image that we are searching for. Our method is based on a metadata-system which is most frequently used in libraries. The Dublin Core is equally suitable for describing both books and images. In order to find the searched document we build two databases: a traditional one generally used in libraries, and an image-database. The metadata enable us to connect these two. Thus, the natural language search in the image-database enables us to connect its results with the text-documents. Besides providing searches based on authors, titles, dates of release and other information, the metadata of the images also provide searches based on subject-headings and keywords. Therefore, the algorithm is capable of arranging the images into a relevant order based on subject-headings and keywords. We are able to align the list of relevant matches from two aspects. The first one regards the relevance of image-matches; the second regards the relevance of text-documents. The searching method even enables us to specify the search by weighting the searched expressions based on various principles. The application of this method enables us to suffice special search demands within library databases.

Keywords: Image collections, Databases, Searching by image, Metadata, Dublin Core

### Impact of Electronic Resources Usage and Interventionist Programme in Nigerian Universities: The Journey So Far

Dr. Susan N. Umeozor<sup>1</sup>, Helen U. Emasealu<sup>2</sup>

**Abstract:** The influence of E-resources in modern technology-driven economy has created serious implications in the way academic libraries support research output of their clientele. This study examines the impact of electronic resources usage in some

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Nigerian Universities through interventionist programme. The survey method using questionnaire will be adopted to collect data. The population of study will be drawn from three Nigerian institutions in three geographical zones. A total of 900 lecturers will be involved in the study. Three hundred (300) respondents will be drawn from each institution as sample size. In each institution, three faculties and five departments will be involved in the study. Twenty respondents (20) will be sampled from each department, giving a total of 100 from each faculty. The data collected will be analysed using frequency counts, percentages and charts. Recommendations will be made based on results from the study.

**Keywords**: E- resources, Interventionist Programme, Nigerian Universities, E-resources Usage

# Impact of Open Data on the Evolution of Health Information Systems.

# A Comparative Study between France and United Kingdom Christian Bourret<sup>1,3</sup>, Journal Boustany<sup>2,3</sup>, Gabriella Salzano<sup>1,3</sup>

**Abstract:** The health data are extremely varied and involve numerous fields as clinical trials, information on patients, public health, financial performance or human resources. The value of health data is tremendous: qualitative and quantitative aspects of these data are often associated, namely in public health sector and in e-science.

It is important to notice that health data are very specific and sensitive. On the one hand, "the use of health data should be viewed as a public good and that achieving the broad benefits of this use will require understanding and support from patients" (Hripcsak & al., 2013). On the other hand, the privacy issues are a major concern for many health systems, because of the risk of identifying persons even from anonymous data.

The opening of health data can lead to new opportunities. The efficiencies from open health data will benefit to everyone by improving services and processes. It can also help to establish public health policies, to prevent diseases, to reduce the health-care expenses or to provide health education.

At a transnational level, the main examples of Open Data resources on population health and healthcare are provided by The World Health Organization (WHO) as well as by the World Bank. These institutions collect data from national health systems, about several health priorities, such as disease prevention, reproductive health, etc.

At the country level, health systems are very heterogeneous, in particular because of organizational concerns and of multidisciplinarity of the domain. In France, main sources of data are the Ministry of Health for hospital care and the statutory National Health Insurance Fund for ambulatory care. At the opposite, the National Health Service (NHS) is the main health care system available in all UK countries.

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Moreover, each country has his own legislation and deals with this kind of data differently. Since 1978, France has adopted the Freedom of Information Act and, in 2005 has transposed the European directive 2003/98 in the French Law. But, in a context where the movement Open Data is gaining momentum, even if France has an old tradition in opening the government data, public decision makers are still hesitant and especially when it comes to data dealing with health.

For all these reasons, we aim to identify and compare overall trends in France and UK about publishing and / or reusing health public data. We will focus on personal data and privacy issues, related to the potential problems that can occur with the opening of anonymized information from large databases.

We aim to answer to the following questions: What kind of data is available? Are they aggregated or not? In which categories these data fall (for instance: health status, quality, economy)? Their format helps developers to use these data and / or to link them, thanks to the semantic Web advanced technologies (Shadbolt, 2010)? Which health information systems can benefit of them?

We are following an empirical approach: this is pertinent to analyze the direct observation of a very contemporary subject of study which grows very rapidly (Yin, 2009). In order to compare the perspectives of opening health data in these two countries, we will discuss on the requirements of different stakeholders and on the public decisions. On the other hand, we will analyze several open data platforms, by using criteria as thematic and territorial coverage, volume, format, organization, accessibility.

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### Impact of space reorganization on Makerere University Library service delivery

#### Patrick Sekikome

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Abstract. Library space is one of the quality assurance standards according to National Council for Higher Education (NCHE) in Uganda. Many academic libraries are faced with challenges of library space which makes it imperative that all the available space should be maximally utilised. Makerere University Library (MakLib) doubled its physical space to 16,000 square metres. Following the opening of MakLib's new building in 2012, some sections and offices were shifted to this extension which left some space unutilised while others were

underutilised. Consequently, MakLib's administration established an Adhoc Space Allocation Committee in February 2013 whose Terms of References included: a) Take stock of all space in the new and old library buildings; b) identify unutilised and underutilised space; c) Propose re-organisation and/appropriate usage of space created by sections and offices that moved to the new library building extension and c) identify other issues related to the Main Library physical space. The committee used an observation method to identify space and interviewed library staff and users to get their views and opinions on how best the identified space could be utilised. Data was collected from library staff using Focus Group Discussions while the university Librarian and her deputies were initially interviewed but later attended a general library staff Focus Group Discussion. A purposive sample of library users who showed interest particularly in the Open Shelves was interviewed. The paper presents findings from the study and reports how the changes have improved library service delivery and enabled MakLib to fully implement its online circulation.

Key words: Space Utilisation, space reorganization, library services, circulation, Academic library, Makerere University Library.

### Impact of the Consumption of Electronic Contents on Research Productivity in Some Portuguese and Spanish Universities

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<sup>3</sup>Library of Faculty of Science, University of Porto, Portugal

**Abstract:** The aim of this study is to investigate the link between the use of electronic resources and the academic output of researchers in 10 universities of Portugal and Spain in the period 2007 to 2012. As for Portuguese institutions, data are analyzed from Universities of Minho, Porto, Aveiro, Beira Interior and Trás-os-Montes and Alto Douro. As for Spanish institutions data are taken into account from Universities of Burgos, León, Salamanca, Valladolid and Vigo.

The analysis of the consumption of contents distributed to the mentioned universities will be undertaken from downloads of four suppliers whose materials are widely used: IEEEXplore, ScienceDirect, SpringerLink and Wiley. In investigating academic output, the databases Web of Science (WoS) from Thomson Reuters and Scopus from Elsevier will be taken into account.

From previous studies we know that the consumption of electronic academic contents shows an upward trend since the Big Deals were hired by the consortia B-on in Portugal and BUCLE and Bugalicia in Spain. We want to check if this upward trend is also a reality in the academic output.

The paper main aim is to investigate the connection between the access to a wider range of journals and a higher international academic output. The analysis will differentiate disciplines, compare the situation of Portugal and Spain and study the research collaboration between both countries.

**Keywords:** Academic libraries, Electronic journals, Information consumption, Scientific productivity, Web of Science, Scopus, Portugal, Spain

# Implementation of Digital Libraries in Nigerian Federal Polytechnics Libraries: A Practical Approach

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Abstract: This paper is a desk study, it is titled "Implementation of digital Libraries in the Nigerian Federal Polytechnics Libraries: A practical approach" the paper discuss digital library as a software system, mostly on web-technology used for storing and retrieving electronic documents. The paper contained the list of the 21 Nigerian Federal polytechnics and the year of their establishments. For example, Yaba College of technology Lagos 1947; it also discusses some open source software initiatives which include DSPACE, GREENSTONE and so on. This paper mentioned some reasons for digital libraries, which include improvement in the link of Digital journals from and to indexing and abstracting databases; Access can also be facilitated from the user's home, office, or dormitory whether or not the physical library is open or not; nine principles for digital library development process were identified in the paper such as: knowing the content; involving the right people; designing usable systems and so on, some technical requirements for digital library were also explained in the paper such as a multitude of meta-data sets, full-text retrieval and compatibility with the Open Archives Initiative standards. In some first generation university libraries in Nigeria, digital libraries were established, e.g. University of Benin Library. However, the paper highlighted some steps involved in creating digital library collection such as: planning, implementation and promotion. Challenges such as shortage of funds, infrastructure, electricity etc were explained in the paper, the provision of way forward for digital libraries in the paper were provided. Conclusion was drawn that there should be linkages between institutions, Research Institutes and governmental agencies. Four recommendations were also made in the paper.

Keywords: Digital libraries, Implementation, Federal polytechnics, Practical approach

# Improving Efficiency of Services in an Academic Organization: Methods and Results

Dr. Sanda Bercovici, The Hebrew University of Jerusalem, Israel, David Yellyn, Academic College, Jerusalem, Israel **Abstract:** These methods regard both internal and external environment of the organization. The external environment is referring to the customers and the internal reflection, using surveys for human resources management processes as personal performance management, internal organizational services, knowledge and learning in the organization. The Hebrew University of Jerusalem, Israel, took recent decisions to enhance its Human Resources services using a new survey to examine the staff performance serving both academic and administrative units. This lecture will analyze the method, the staff reaction and cooperation and the conclusions at the Hebrew University of Jerusalem.

Keywords: Performance measurement and evaluation, Human Resources survey, Academic organization staff evaluation

### Inclusiveness: The Provision of Information Services to Oersons with Disabilities at Makerere University Library

#### Monica Naluwoza, Makerere University Library

Abstract: Makerere University Library's (MakLib) mission is to meet the study, teaching, research and outreach information needs for sustainable development. Its primary users are the University students, although it also serves other users like the University academic staff, administrative staff, support staff and the external users. Among the users are the different persons with disabilities (PWDs). In the last ten years, Makerere University Library has introduced several different services for its users in order to fulfil its mission and remain relevant. These include services to the PWDs among others. The problem is, there has never been an evaluation of these special MakLib services to the PWDs ever since they were introduced. The major objective of the study was to assess the MakLib services to the PWDs. The study therefore presents findings from a survey to persons with disabilities at Makerere University Library. It highlights the different services MakLib offers to the PWDs, challenges faced, as well as recommendations. The researcher used both a qualitative and quantitative research design. The qualitative research design was used to explore all the aspects of library services for persons with disabilities. The quantitative research design was used to actually find out from the library users (PWDs) through a survey questionnaire of the service delivery at MakLib. The emphasis on the analysis was based on data gathered from the questionnaires. Key findings indicated that MakLib has done a lot in the provision of information services to the PWDs. One particular user reports that 'compared to when I joined Makerere University in 2000, there is substantial improvement on PWDs facilities".

It is against this background therefore that, this study also presents the importance of assessing all the other special services offered at MakLib for awareness, better access and improvement. Recommendations were put across to the library management for better service delivery to persons with disabilities.

**Keywords:** Information services and Persons with Disabilities (PWDs)

### Indian Contribution towards Research on Leather Science: Qualitative & Quantitative Analysis

Dr. Anita Basak<sup>1</sup> and Dr. Ratna Bandyopadhyay<sup>2</sup>

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**Abstract:** The history of civilization shows leather as a prime substance in every sphere of life. Development in the chemistry of tanning process has given a new shape to the subject. Gradual development of research in leather science and industry help to attain a higher degree of achievement. Simultaneously, growth of research activities in leather industry is visible through the establishment of leather research institutes in India. The research institutions are playing an important role in education, research, training, testing, planning the activities related to leather industry. It is found that during World War I, few tanning schools were set up in India (mainly, Madras – 1914, Kanpur-1916, Calcutta- 1919, Jalandhar- 1934) to train-up workers for the requirement of the British army. During 1940s, a Leather Research Committee was set-up under the assistance of Dr. S. S. Bhatnagar (the-then Director of Council of Scientific & Industrial Research-CSIR) and B M Das as Chairman of the Committee to enhance the research on leather manufacture related to the development of leather industry. Now a great number of leather institutes are flourishing- such as, Central Leather Research Institute (CLRI), Govt. College of Engineering & Leather Technology(GCELT, formerly, Bengal Tanning Institute/ Calcutta Research Tannery), Central Footwear Training institute (CFTI), Indian Institute of Leather Products (IILP), Footwear Design & Development Institute (FDDI) etc. Even a good number of Associations are extending their hand to the institutes to enrich the research areas in leather science and technology and to broaden the leather industry, such as Council of Leather Exports (CLE), Indian Leather Technologists' Association (ILTA), All India Skin Hide Tanners Merchants Association (AISHTMA), Kolkata Leather Complex Tanners Association (CLCTA), Leather Chemical Manufacturers Association (LCMA) etc. The research activities are now gaining strong recommendation of CSI (Council of Scientific & Industrial Research).

This paper explores the research activities in leather science and industry in India as compared to global picture. The qualitative analysis in this research paper is based on published articles over the last seventy years in two most important international journals: Journal of American Leather Chemists Association (JALCA) and Journal of the Society of Leather Trades' Chemists (JSLTC). This will highlight India's contribution, both qualitative and quantitative, to leather science and industry. This analysis will also show the growth of the subject, major research areas, important institutions and major contributors in India.

# Increasing Student Awareness of International News and Events

Lisa Romero

Associate Professor, Head, Communications Library, University of Illinois, USA

**Abstract:** Improving students' facility with international media is increasingly important to educators and librarians. This paper demonstrates how an academic library provides users with innovative access to international media, engages students with international news, stimulates open collaboration, facilitates using media as information, and pulls broadcast media into the classroom. An innovative use of library space is also detailed. The results of a user survey addressing use, design, and value of an international news lounge will be presented.

**Keywords:** International News, Student Engagement, Broadcast Media, Information Access, Library Facilities

### Indicators for Benchmarking in Norwegian Academic Libraries: Testing the Usability on Collection Data

Ane Landoy, University of Bergen Library, Johanne Raade, University of Tromso Library, Harald Bohn, The Norwegian University for Science and Technology Library

**Abstract**: In a world of rapid changes, there is a need for leadership and strategic planning based on statistical evidence - evidence based leadership. In Norway, the National Library has led the way in developing indicators for the public and the academic libraries, and these indicators may be used either longitudinally or for benchmarking within or between libraries. In this paper, the authors will give examples of the use of indicators for the usage of the university library holdings, through the traditional measurements of loans, as well as statistics on down loads of electronic books. Keywords: Norway, Academic libraries, Indicators, Usage statistics

# Influence of Self-efficacy on E-library Usage by Some Selected Undergraduate Students of a Nigerian University Ajibola Sunmade Gbotosho<sup>1</sup> and Pius Olatunji Olaojo<sup>2</sup>

<sup>1</sup>The Library, College of Humanities and Culture, Ikire Campus, Osun State University, Osogbo, Nigeria

**Abstract:** This study focused on the availability and use of electronic library (e-library) by undergraduate students of University of Ibadan, Nigeria with emphasis on the influence of self-efficacy on e-library usage by undergraduate students. It discussed the range of collection of e-resources available for use, and how much the e-library is able to meet the teaching, learning and research needs of the undergraduate students. A total of 150 copies of questionnaire were administered on the respondents selected from the Faculty of Education out of which only 131 were returned with useful responses. The study revealed Internet/e-mail facility, e-journals, e-books and e-catalogue as e-resources commonly available for undergraduate students use, and make regular use of only

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internet/e-mail facility, e-journals, e-books and e-databases. The study also revealed that students make use of the e-library majorly for journal search, textbooks search and research topic search while the e-library facility is considered only adequate for journal search. Moreover, the study revealed that students' self-efficacy has influence on their e-library use. The results of the study further suggest that there is a significant positive relationship between students' self-efficacy and e-library use.

# Information Literacy and Citizens' Ethical Education: Mexico's Case

Antonio Cobos Flores, Doctorate's student in Library and Information Studies of the National Autonomous University of Mexico (UNAM) / Director of Bachelor's Degree in Library Sciences of the National School of Library Sciences and Archival Sciences (ENBA/SEP)

Abstract: Information is an essential element in human development. In this sense, information access is a basic right for citizens' participation in decision-making processes. In this aspect, Ethics and citizens' Ethical education should influence personal decisions, work-related decisions, and, in a macro level, public policies related to information access and use. Since Mexico has a historical significance, cultural personality, territorial extension, and a geostrategic location, it has become a very important support. Nowadays, citizens' participation is a fact and Ethics is a persistent factor to improve people and consequently, institutions. In the 21st century, education is crucial in people's life because it increases development possibilities. Therefore, the aim of this study is to analyze from a public policies framework: What is Mexico's project regarding the subject of citizens' Ethical education from Educational National Policies linked to informational alphabetization from the framework of the Development National Plan 2013-2018, emphasizing in the development of informational skills and abilities? The methodology to be used is a cross section study of the Development National Plan 2013-2018 and the Educational National Plan of Mexico, allowing a descriptive analysis and the identification of citizens' Ethical education. Then, this analysis may be related to the development of skills and abilities established in the informational alphabetization, achieving a link to national public policies (Development National Plan 2013-2018 and Educational National Plan).

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# Information Literacy in the Capes Portal of E-Journals: The Impact of User Training Programs

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Abstract: This research aims to determine the impact of training in the use of the Capes Portal of E-Journals at the level of information literacy of students. The paper starts with a literature review on the Capes Portal, the largest digital library of scientific journals of Brazil, its history and evolution. The technological alternatives for information retrieval on the web are discussed: federated search; metadata harvesting and web discovery service. Next, the papers presents a theoretical framework about information searching, construction of search strategies and information literacy, its history and evolution of the concept; information literacy in Brazil; information literacy in higher education; standards for information literacy; methods and tools for assessing information literacy. The research will use a qualitative approach. Data collection will be made through questionnaires, interviews and observation. The sample will be formed by students who enroll voluntarily in a training program offered by the university library to the UFMG (Federal University of Minas Gerais) community. The research universe consists of all undergraduate and graduate students of University. The analysis as well as data collection will be carried out through various strategies. The data obtained via questionnaires will be categorized and interpreted using as basis the standard of ACRL -Information Literacy Competency Standards for Higher Education. The interviews will be analyzed using the technique of content analysis developed by Laurence Bardin. The observations will be analyzed by qualitative methods through the organization, analysis and interpretation of data in order to monitor the cognitive process and the system use by the students.

**Keywords:** Capes Portal of E-Journals, Information literacy, Assessment, Higher education, University library, User training, Information retrieval, Search strategy, Qualitative methods

# Information Policies as Strategic Approaches in Informational Literacy: A Multicultural Society

Nayeli Gervacio Mateo, M.Sc., Doctorate's student, Postgraduate in Library and Information Studies Postgraduate Direction, National Autonomous University of Mexico

**Abstract:** In its proactive character, the library may develop a decisive role integrating minority groups into society through cultural interchange and informational alphabetization. In this sense, information policies should be directed to create strategic

approaches considering several actors. Developing information policies, as key strategies to encourage informational alphabetization in multicultural societies from a public library's point of view, promotes the abilities to an effective and ethical access, evaluation, and use of information. Also, an effective knowledge interaction is facilitated, accepting the value of respect for information differences and oppositions. This study deals with the value of informational alphabetization in the process, design, and implementation of information in a multicultural society comparing a Canadian and Mexican public library. The aim is to analyze the origin from each country's point of view considering information as a strategic element of the ideological machinery of multicultural communities.

Keywords: Information policies, Information literacy, Multicultural society, Strategic approaches

### Information Seeking Behaviour and the Use of Internet as Correlates of Effective Performance of Medical Doctors of General Hospitals in South-Western Part of Nigeria

Doreen Yemisi Olorunfemi<sup>1</sup>, Kehinde Abayomi Owolab<sup>2</sup>

**Abstract:** Seeking information is a general activities normally involved in by different professionals in diverse disciplines and technical occupations. However, studies of how medical doctors search for electronic information resources to administer treatments on their patients are moderately few, especially researches that examine whether medical doctors utilise Internet resources to diagnosed and treat patients. The purpose of this paper is to investigate the extent to which the medical doctors in South-Western Nigeria utilise Internet resources in the treatment of their patience. This paper investigates the information seeking behaviour of Medical Doctors in a cross sectional study of how medical doctors use Internet-based resources as correlates of effective performance at the General Hospitals in South –Western part of Nigeria. All the 600 medical doctors from the six General Hospitals in the South-West, Nigeria formed the study sampled population.

A total number of six hundred questionnaires were administered to the medical doctors, 420 completed questionnaires were retrieved, with 412 copies of the questionnaire found usable representing a return rate of 68.6%. Descriptive statistic was used to analysis the data using frequency count and percentages for easy interpretations. The only hypothesis use guiding the study was there is no significant relationship between the use of the Internet and effective performance of medical doctors in South Western part of Nigeria. The hypothesis was test using Pearson Product Moment correlation analysis at 0.05 level of significant. Finding revealed that majority of the medical doctors majorly used Internet for communication purpose and email was their mostly used Internet-based resources. The paper recommends the need for medical doctors to utilise Internet resources source medical related issues concerning their patients' ailments. It was also recommends that general hospital managements in South-Western part of Nigeria to establish electronic information resources or overhaul the existing ones in their medical

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libraries to enable medical doctors' to utilise the e-libraries to diagnosed and treat patients.

#### Innovative Library Service in Jagodina, Serbia, Solves Problems of Farmers

#### Suzana Tanasijević

Librarian, Public Library "Radislav Nikčević", Jagodina, Serbia

**Abstract:** This paper speaks of AgroLib-Ja (Agricultural Library in Jagodina), project of Public Library of Jagodina, Serbia, which has developed the idea of changing the libraries according to the changing of users' needs.

Public Library of Jagodina has transformed its operation from a model of traditional passive library (committed to reader) into a model of modern library (committed to user), library of modern age, which is not only active and interactive but also socially integrated into the local community.

According to that new role, Public Library of Jagodina identified a problem among farmers and during 2008 conducted a research. The aim of the research was identification of the needs of farmers and the role of village libraries in satisfying those needs. In response to this research, an innovative project has been created, titled AgroLib-Ja, aimed for revitalization of five rural libraries and creation a network of rural libraries that provide information and communication services, especially for farmers.

Now, in five rural library branches the following are available:

- Complete renovated and adapted pleasant library surrounding where farmers can meet, connect, learn and share experience from best practices.
- Free Internet access and ICT training which helps farmers in sharing best practices, searching for useful information, such as the state subsidies, incentives and grants. Farmers' ICT literacy increases through using computers and Internet in the libraries. To date, over 200 farmers have attended ICT training and just from January to March 2013, there were 7 ICT trainings for 27 farmers.
- Agricultural lectures, enhanced agricultural production through learning new information and applying it in practice. To date, the libraries hosted 37 professional lectures with 23 speakers attended by 1,791 farmers.
- Agricultural journals and literature which help farmers in applying new farming methods.
- The portal AgroLib offers automatic weather updates, news, digitized magazines and books and within online marketplace www.agrolib.rs/pijaca/ for free registration and advertising, improving income and financial situation of farmers. Since 2010 when AgroLib was established, there have been more than 90,000 visitors. Only in 2013, until March 22 there were 16,559 visits, about 10% more than at the same time last year. The project started in 2010 with support of EIFL within PLIP and still is ongoing. Since then, it has received awards from:
- The Ministry of Culture of the Republic of Serbia in 2011 and 2012;
- Beyond Access 2012;
- WSIS (World Summit on the Information Society) project prizes 2013;
- Erste Foundation 2013, in the category for Social Integration.

The aim of this paper is to present that Jagodina Public Library invented and implemented a unique model of rural libraries which activated and caused numerous of

qualitative and quantitative social, economic and cultural changes in real life of people in the local communities and beyond. Also, the aim of this paper is to demonstrate, that the greatest contribution of the AgroLib is changing of life value and attitudes of farmers which is now based on principles of lifelong learning and acquiring new ICT skill.

**Keywords:** AgroLib-Ja project, a new model of library ICT service for farmers

# Institutional Repository Access: A Case Study of IICT, CSIR D. Gayatri and G. Padmini

Council of Scientific & Industrial Research (CSIR), India

**Abstract:** This paper presents the results of an effort made to develop an IR of research publications of Indian Institute of Chemical Technology, Hyderabad by using DSpace an open source software, which is jointly designed by MIT and HP. DSpace is a digital tool that captures, stores, indexes, preserves and redistributes the intellectual output of an organization in digital formats. It is compiled by identifying, extracting metadata from several authentic, published sources by constructing a suitable search strategy. The extracted metadata are standardized and duplicate records are removed. The repository is updated periodically. Through IR librarians have an opportunity to work more closely with scientists, researchers and students in order to promote the growth and run an effective institutional repository.

### Institutional Research Outputs and Library Collection Development

Metin Tunc<sup>1, 2</sup>, Nuran Yilmaz<sup>3</sup>

**Abstract:** This study aims to contribute a model for development of research institution library collections. Since the research output is the core mission of universities or other kinds of research institutions, the libraries are serving to institution to accomplish same mission. But how well libraries are harmonized to this mission? This study analyses library collection distribution and research output distribution of institution as of per scientific fields. Library budget expenditures per scientific collection are also analysed in the same scope. Thus, it has been possible to figure harmonization performance of library collection as well as library budget with institutional research outputs. Sample study have shown significant outcomes.

**Keywords:** Library Collection Development, Library Collection, Budget Allocation, Research Output, Institutional Harmonisation

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# Intergrading the Marketing Mix into New Library Services Eugenia Sisamaki, Vasiliki Mole

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**Abstract:** It is important to realize that libraries are now just one of many information sources people can choose from. Based on the necessity for a competitive advantage, it is obvious that marketing methodology has become essential for creating a successful library (Koontz, 2006). After a service is developed based on market research, the marketing plan is created and the aim, the objectives, and the promotion strategies are established (Ohio Library Council, 2008). This marketing oriented approach has been adapted from the Hellenic Academic Libraries Association Link (HEAL-link, www.seab.gr) in order to elevate its image and functionality to a higher level. At the moment, HEAL-link has undertaken and is currently implementing 14 new services based on new, open access technologies and software. Nevertheless, it is has become clear that in order to fully exploit the above mentioned services, it is necessary to raise the awareness about them by using the proper promotion and evaluation strategies.

Keywords: Marketing, Library services, Promotion strategies, User needs, HEAL-link

# Internet resources for watermarks Emanuel Wenger, Maria Stieglecker, Erwin Frauenknecht

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**Abstract:** Watermarks are collected systematically since approximately two hundred years. The main purpose to do this is the localization and dating of manuscripts, documents, prints, drawings, and so on which are done on paper. For many years, watermarks were published in numerous watermark catalogues in different languages (French, English, German, Spanish, Russian ...) and additionally scattered to numerous publications on different subjects (e.g. art history, musicology ...).

Nowadays, many watermark collections are published in digital databases on the web. This makes the search and retrieval of specific watermark more easy and fast. The EU project Bernstein — The Memory of Paper has developed a portal (http://www.memoryofpaper.eu) which allows the multilingual simultaneous access to remote distributed databases independent from the language. The portal tries to give access to all watermark databases on the web. Nowadays, Bernstein can access more than 195.000 watermarks of 19 watermark databases from eight countries. More collections are in preparation and are going to be connected soon.

This paper discusses the main idea of the portal, the minimum requirements for building up a database containing watermark descriptions, and the way how to connect it with Bernstein.

**Keywords:** Paper, Watermarks, Manuscripts, History, Art history, Musicology, Cataloguing

### Investigate Information Needs of Students of the School of Allied Health Sciences in Tehran and the Role of Libraries in Providing these Needs

#### Mahiar Sarmadi, Milad Amay

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#### Abstract:

**Introduction:** Library users expect fast and direct access to the information they need and the variety of users' searching behavior have led to new library services. Therefore the purpose of this article is to investigate information needs of students of the school of allied health sciences in Tehran city and the role of libraries in providing these needs.

**Methods:** The present study adopts a survey applied research method. For data gathering the authors use a researcher-made questionnaire. The validity was approved by professors and professionals and a pilot study in the sample size. The reliability was checked by Alfa Cronbach. Data were collected using stratified random sampling through a questionnaire distributed among university students of the school of allied health sciences in Tehran City (n = 500). Data were analyzed using SPSS. Data were analyzed by Excel software and quantitative statistics such as percentage and frequency were used

**Results:** The findings showed that the searching needs of the students are different in various semesters of their study period and also different in various universities. The main reason for not using the library resources correctly is lack of knowledge and education about it.

**Conclusions:** It is recommended to educate the university students how to use the electronic resources for a faster and better access to data they need. Also, communication between professors and librarians can help development of electronic databases of the library as well as improvement of the students' literacy of the library usage.

 $\textbf{Keywords:} \ Information \ needs, \ Information \ seeking, \ Students, \ Iran$ 

# Investigating Stylistics Features of Turkish Texts Oguz Aslanturk, Ebru Akcapinar Sezer and Hayri Sever

Hacettepe University, Department of Computer Engineering, Turkey

**Abstract**: Authorship attribution is one of the problems of stylometry and deals with identification of the author of a given text within a set of candidate authors. It has been studied with various methods, as well as Rough Set-based classification. Feature selection and corpora construction are essential parts of creating classifiers and daily newspapers are commonly used for building corpora in authorship attribution studies.

As well as classification of authors, two main problems were investigated in this study: presentation of most descriptive lexical and syntactic features, and testing models to find out whether they are time resistant or not. Although we can mention many lexical and syntactic features for an author and it is possible to use all of them for authorship attribution, when input size of machine learning methods are increased, predictive models become more complex. Additionally, modeler does not know the influence of an individual feature on prediction performance. Among the steps of Rough Set-based classification, reduction is the most time consuming one and reduction of larger feature sets take considerably more time. Regarding that some features are language dependent, investigation of feature sets to find the most distinctive and smallest one for a particular language becomes an important problem statement. To overcome this issue, totally 37 lexical and syntactic features were studied in this study and they were partitioned into 6 groups. These groups are namely Basic Structures of Text (BST), Special Sentences (SS), Basic Punctuation (BP), Advanced Punctuation (AP), Word Types (WT), and Word Usage (WU). Two of them, BST and SS, were set as base groups while remaining 5 groups were being used for creating various combinations. 64 feature combinations were investigated in total and most successful ones were identified. The corpora was composed of 5770 articles belonging to 4 different authors of 2 different Turkish daily newspapers. All the authors write in "Life" genre, and articles cover a 5 years period. We sampled train and test data with two different methods. At first, training-testing sampling was implemented considering the dates of articles. For example, the articles written in 2007-2010 period were used as train data and the articles written later (2011) were used as test data. The reason of this type of sampling is to test the models strength against time. It is an important point in author attribution because, if model is time resistant, it can be trained with available data and used for future data. Second method of sampling was 5-fold cross validation to observe classification performance when time information is ignored. Totally 9 different train and test data sets were produced by considering various time intervals and sampling methods. In conclusion, 576

The highest accuracy of 3 models which were sampled with 5-fold cross validation is 99.79% and this accuracy was obtained for 2007-2010 time interval with SS\_AP combination. In addition, 3 of the 6 time sensitive models also reached high accuracy values. Time intervals of train/test data, highest accuracies and smallest feature group combinations of these models are {2007-2009/2010, 99.74%, SS\_AP}, {2007-2009/2010-2011, 99.73%, SS\_AP or BST\_AP}, and {2007-2010/2011, 99.72%, SS\_AP or BST\_AP}, respectively. SS\_AP apparently constitutes the best performing feature set that is common for all of these models, regardless of the sampling method of the model. **Keywords:** Rough Set-based Classification, Authorship Attribution, Feature Selection

classification experiments were performed for 64 different feature combinations with 9

## An Investigation of Iranian Scholars' Approach to Citing Open-Access Sources: A Case of Scientific Productions of Shiraz University in 2010

Dr. Hajar Sotudeh<sup>1</sup>, Aida Pooladian<sup>2</sup>, Maryam Yaghtin<sup>3</sup>

different models.

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**Abstract:** Open access movement endeavors to break the monopoly of commercial publishers over scholarly and academic journals and to provide the public with free access to scientific sources. The movement has particularly served the developing countries that suffer from a lack of access to scholarly sources due to budget deficit, inflation and high subscription costs of scientific journals. However, the scientific community in these countries may fail to utilize open-access sources appropriately due to lack of awareness and deficiencies in their technological infrastructures. On the other hand, they may pay little or no attention to the scientific validity of open-access journal articles, as not all open-access journals or publications are likely to prove prestigious. The present study aims to examine the references of the scientific productions of Shiraz University in 2010 as a sample to investigate the approaches of scholars at a third-world university to using open-access sources. In this regard, the study tries to find the share of Open Access journals of the total non-subscribed sources used by the researchers, determine the Open Access patterns mostly used and verify their impacts.

Keywords: Open access, Shiraz University, References, Scientific papers, Impact

### Journal Argumentos, Estudios Críticos de la Sociedad: Bibliometric Analysis

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<sup>1</sup>Ph.D. student, Library and Information Studies, National Autonomous University of Mexico (UNAM), Mexico

**Abstract:** Bibliometric studies allow us to understand the development of the scientific activity of different disciplines from the analysis of the documents are published. Argumentos: Estudios críticos de la sociedad is a publication of the Division of Social Sciences and Humanities of the Metropolitan Autonomous University Xochimilco where the results of different investigations carried out in this institution spread, however has not been evaluated or analyzed its impact. So the aim of this article was to analyze the behavior of this journal bibliometric during the 1999-2009 period. The meteodología used consisted of the application of Lotka's Law. Also, for this analysis the productivity index of the researchers, the percentage distribution, type of items, the number of authors and the references was calculated. Finally, and based on the results Lotka's Law is found, actions on the trend of the topics are defined and make proposals for the allocation of keywords.

**Keywords:** Bibliometric Analysis, Law of Lotka, Productivity index, Bibliometric indicators

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### Knowledge Organization Systems in the Libraries vs Subject Knowledge – 'Knowledge organization' as a Subject Heading – Case Study

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**Abstract:** The purpose of this article is to examine relationships and interdependences between the research field of Knowledge Organization (KO) discipline and content description of the documents on the 'Knowledge organization' recorded in library catalogues. The study was based on analysis of the systems available in the libraries of some universities in Poland. The results of the study are addressed primarily to the specialists in the library and information science, librarians and professionals involved in the creation of the domain and developing a KO.

To achieve this goal, the 'Knowledge organization' subject heading in subject catalogues of these universities libraries in Poland were examined. The study was conducted in the OPAC catalogues of Polish university libraries. The results of the study are broader terms, narrower terms, related terms, preferred terms and non-preferred terms. We also examined semantic relations (synonymy, antonymy, hypernymy, hyponymy, meronymy, holonymy, coordinate term, otherwise related). Other non-linguistic relationships were determined (associative relationships, mereological relations, generic relations).

The results were compared with the proposals of definitions and terms of KO. One of the first works on the theory of classification of the literature by Henry E. Bliss was included: Organization of Knowledge in Libraries and the Subject Approach to Books (New York, 1933). Definitions developed by representatives of ISKO (International Society for Knowledge Organization) have been adopted for the study (See: H. Peter Ohly: Organization, Management and Engineering of Knowledge: Rivals or Complements? In: 20 Años del Capítulo Español de ISKO. Actas del X Congreso ISKO Capítulo Español (Ferrol, 2011). Coruña (España), 2012; Birger Hjørla: Theories of knowledge organization — theories of knowledge. "Knowledge Organization" Vol. 40 Issue 3 (2013), p. 169-181).

An answer to the question whether the content description of the 'Knowledge organization' in a Knowledge Organization Systems (KOS) in the studied catalogues is consistent with the definitions/terms of KO proposed by theorists/researchers was attempted. The differences between them were presented and the reasons for the differences were discussed. The detailed analysis of the terms in these alphabetical subject catalogues which can be used to examine the semantic field of different disciplines associated with KO was presented. The problem, how far different indexing principles and different application can be managed all together, was investigated.

# Knowledge Preservation of Oral Tradition: Case Study of Minangkabau's Randai Performing Arts

#### Yona Primadesi

Padang State University, West Sumatera Indonesia

Abstract: The aims of this research is to identified the elements of the oral tradition on Minangkabau's Randai Performing Arts, knowledge preservation activities that have been done, all constrains in the knowledge preservations process and all steps that can be done to do the knowledge preservation on Minangkabau's randai performing arts. The research method that used in this research is qualitative approaches and the methods of data collection are through interviews and document analysis. The result of this research concludes that randai is an artistic tradition which built from three components, namely silek, kaba and dendang or gurindam. Each element is being supporting each other in order to build the main function of randai, i.e. as representative and media communication as well as the cultural identity of Minangkabau indigenous community. In its development, the bakaba babarito Minangkabau's tradition accelerate the process of socialization of randai and the transfer of knowledge inside randai. However, it's not being an obstacles and barrier to maintain the originality of randai itself. The preservation activities that have been done, on general, is in the form of socialization activity which is on face to face interaction and on the limitation process. The externalization activity on documentation of randai tradition is already begun, but not at the analysis level, repackaging, and also transfer of knowledge. So that most of the knowledge are only store in government agencies such as the department of tourism. The lack of policy on the use of Minangkabau language in formal education environment and policy to revive the surau function as an informal education media for Minangkabau community became another trigger on knowledge loss of randai in society. Therefore, it is highly recommended the participation of all levels in society and government to maintain and preserve the knowledge of randai with more structured and continuous in order to maintain the originality and the main function of randai itself.

**Keyword:** Oral tradition, Knowledge preservation, Minangkabau, Randai, Silek, Kaba, Dendang

## Leadership and Management in Estonian Academic Libraries: Leader's Role and Competencies

Sigrid Mandre, Tallinn University

**Abstract:** There is a lot of research about academic library leadership. This research includes different sides of leaders' activities, functions and characteristics. In most studies top leaders are examined. Only few studies have been done about middle managers. This study was designed to include both top and middle level leaders. The goal is to investigate different levels leaders' views and understanding of their own and the other level leaders' activities and competencies, needed for accomplishing the leader's role. The presumption of the study is that all level leaders constitute a team, and therefore need distinct understanding of other team member's role in the library

leadership and management process. The additional research issue is leaders' education. Is it important, that the academic library leader has a degree in library and information sciences or there is no need for professional educational background in leader's competence? The research strategy used in this study is Grounded Theory. Grounded Theory is seldom used in academic library leadership studies. Grounded Theory is a qualitative method of social research. This approach gives opportunity to develop the concept of the leading team. The choice for using grounded theory is based on the theoretical approach, that leadership and management in organization is an integrated process. Different levels' leaders have the role what includes specific competencies and all these roles and competencies have their purpose and place in the leadership and management process.

In the presentation the use of Grounded Theory in the pilot study of the research is described.

Keywords: Leadership, Management, Academic libraries, Estonia, Grounded theory

### Leadership Challenges in Academic Libraries in Moldova, Norway and Romania

#### Angela Repanovici, Transilvania University of Brasov, Romania, Ane Landoy, University Library of Bergen, Norway

**Abstract:** The main focus in the Moldovan-Norwegian library development project "Development of New Information Services for Moldovan Higher Economic Education", is on developing the academic library of ASEM, Economic Academy of Science of Moldavia, for the benefit of Moldovan students and scholars. This is done in partnership between the Academy of Economic Studies, Moldova, and the University of Bergen, Norway. However, this can not be achieved without developing the library leadership as well. In this paper, the leaders of Moldovan academic libraries are investigated in order to find their attitudes to challenges, and their conception of the urgency of the challenges will be compared with similar studies of library leaders from Norway and Romania. Keywords: Norway, Moldova, Romania, Leadership, Attitudes, Challenges

# Leaning the Library: Process Improvement at LSE Library Joanna Tate

Projects & Development Librarian, London School of Economics Library

**Abstract:** Like most libraries, LSE Library is under pressure to do more with less in these challenging times. The Library is also involved in a business change project, looking to implement culture change and reorganise the way we work, to tie in with the implementation of a new Library Management System. In order to achieve this, we have introduced a programme of process improvement across the library. Process improvement is important to:

• To use resources more efficiently

- To improve student, staff or visitor experience
- To ensure the processes are fit for purpose
- To prepare for planned system improvements or upgrades (so that new systems aren't developed on top of inefficient or out of date practices).

We decided to follow the LEAN DMAIC methodology, with a dedicated team of business change champions, leading the reviews. The process reviews involved all staff in rapid improvement workshops, combined with measurement and analysis of the processes to identify bottlenecks and wastes. The results of the workshops and analysis have fed into redesigned processes, and the reorganisation of teams across the Library. The process reviews have also acted as a framework for culture change, encouraging cross-library working, a focus on evidence and analysis for decision-making, and empowerment of library staff.

Keywords: Lean, Process reviews, Culture change, Measurement, Analysis

### Learning Resources Development for School Library Media Centres in a Challenges Nation

Pius Olatunji Olaojo

Abadina Media Resource Centre, Faculty of Education, University of Ibadan, Ibadan, Nigeria

Abstract: The paper examines roles of school library media centre (SLMC) specialist in the curriculum delivery of academic programmes in schools. Also, discussions were made on various learning resources that should be developed by media specialist whenever those resources are not available especially in a nation faced with numerous challenges that have to do with resource materials provision for learners. The dearth of resources in SLMC in Nigeria was emphasized with particular interest in Oyo State, a leading state in education industry in Nigeria. What media resources centre requires is of interest to the writer and the need for learning resources in SLMC was emphasized. The paper highlights functions of SLMC in Nigeria especially where government owns most of the schools but allows private individuals and/organizations operate private schools but the government controls all schools and exercises some form of control over them. Required personnel needed in SLMC were discussed. Necessary criteria for consideration in any media resource development effort were enumerated as well as methods of learning resources collection development. Useful suggestion were made to assist SLMS perform expected roles in collection development exercise so as to combat likely problems that are related to resources development and challenges bothering on attitudinal disposition of school administrators and other stakeholders in school setting.

**Keywords:** School library media centre, School library media specialist, Learning resources collection development, Oyo State, Nigeria

### Legal and Policy Risks for Digital Preservation Using Cloud Computing Technologies

Eva Montenegro Piñeiro, Tallinn University

**Abstract:** The aim of this case study is to investigate the risks and implications that outsourcing components of a digital preservation service using cloud computing technologies might have for institutions with long-term preservation mandates, particularly in the legal and policy aspects. I will put the focus on public institutions that are currently using or considering the use of cloud-computing technologies to preserve the digital assets they are responsible for. There is a growing agreement in the professional and research community on defining digital preservation as a risk management exercise. The use of cloud computing brings in new threats and uncertainties and thus the variety of issues concerning those assets are likely to be identified and managed in terms of risks. Identifying those risks, their mitigation strategies and the implications for trust are the expected outputs of this research. Keywords: Cloud computing, Digital preservation, Long-term preservation, Trust, Risk

Keywords: Cloud computing, Digital preservation, Long-term preservation, Trust, Risk assessment

### LibGuides as a Tool for the Bottom-up Reshaping of the Academic Library System at the University of Belgrade

Prof. dr Aleksandar Jerkov, Vesna Vuksan and Adam Sofronijevic

University of Belgrade, University Library "Svetozar Markovic", Serbia

**Abstract:** The paper discusses efficiency of the bottom-up approach in reshaping of a decentralized academic library system based on the case study of academic libraries at the University of Belgrade. Specifics of the case that arose from the implementation of LibGuides ULSM project in 2012–2013 are compared with features of the possible top-down approach. The image of such a process is depicted in the literature review, presenting the organizational structure changes as in Moran (2001), reference and branch libraries as in Kohl (2002) and physical service environment and facilities as in Paton, Beranek & Smith (2008). This image juxtaposed with the case study provides a clear account of the benefits of the bottom-up approach both in terms of immediate results and in paving the way for the long term success of this transformational process. Some downsides are also discussed such as the lack of structural framework for the process resulting in a never-ending story type of a situation both for the participants and for the stakeholders.

Some aspects of LibGuides as a software tool for creation of subject guides are analyzed mainly in regards to its potentials to develop meaningful collaborative environment. Such an environment grounds basis for networking and professional bonding that are the main prerequisites for the bottom-up approach. Some general conclusions based on the case study are also presented in regards to the bottom-up approach along with recommendations on how to manage some organizational structure and organizational culture elements in order to foster this kind of approach with librarians.

The analysis also depicts other cases of collaboration based on LibGuides tools presented in literature such as May & Delgado (2010), Bernier (2010) and Glassman & Sorensen (2010) and outlines the differences and similarities to the case study discussed in the

paper. A solid base of knowledge about collaborative potentials of LibGuides is built along with some examples of the possible use in different library systems.

University library "Svetozar Markovic" (ULSM) is the oldest and the largest university library in Serbia. Being the central library of the University of Belgrade, it continually strives for excellence in librarianship and spearheads the efforts of Serbian academic library network to connect more closely with European libraries. One of its main goals over the past decade has been to provide more efficient service to users by discovering the ways to connect highly heterogeneous and dispersed network of Serbian academic libraries into a more effective system. As of January 2014 this complex task is still ongoing, but unexpectedly a very important part of the puzzle was discovered and put to work in the course of implementation of the LibGuides ULSM project. The results presented in this paper may be valuable for other academic library systems aiming to achieve the similar goal.

# LibQUAL+ Trends: Faculty and Student Perceptions and Expectation in ARL Research Libraries, 2003-2011

Martha Kyrilidou, Association of Research Libraries (ARL), USA, and Nisa Bakkalbasi, Columbia University Libraries and Information Services, USA

Abstract: LibQUAL+<sup>TM</sup> is a metric that captures key dimensions of library service quality, namely Affect of Service, Library as Place and Information Control. LibQUAL+<sup>TM</sup>'s primary role may be to monitor our user base and ensure that we continue to meet their needs and expectations, while we launch and design new buildings, new methods of teaching, new ways of understanding the world, and new ways of deploying our resources. In that sense LibQUAL+<sup>TM</sup> may be part of the established toolkit. In this paper we discuss key trends on perceptions and expectations in faculty and undergraduate students in key questions representing the three dimensions of library service quality. Using Columbia University Library as a case study, we illustrate peer comparison capability of the LibQUAL+<sup>TM</sup>.

Results

Based on many thousands of responses, we can articulate with some confidence that user needs and expectations for undergraduate students and faculty are changing, sometimes in very different ways.

Affect of Service: Giving users individual attention

- Undergraduates are not very interested in receiving individual attention
- Among all respondents, a slight decline in Minimum score, a sharper decline in Desired score, and a slight increase in Perceived score contributed to a widening positive adequacy gap and a declining negative superiority gap.

Library as Place: Community space for group learning and group study

- Marked difference in expectations
- Undergraduates, along with library staff, have significantly higher Desired and Minimum scores than other groups, while faculty rate this item lower than any other. Information Control: Print and/or electronic journal collections I require for my work
- Highest average Desired rating of any subgroup (faculty)

• Undergraduate students display a positive adequacy gap for all years; faculty have a significant negative adequacy gap, because even though their Perceived response is trending upward, their Minimum is also rising sharply.

Conclusion

We conclude that we have plenty of data to understand major differences between key constituent groups. As we change our services, our spaces, and our organizational structures we look forward to continuing to track our users' sentiments towards our ability to provide high-quality services. Looking at the aggregated results from a particular library point of view, using the same instrument over time and across institutions is enormously important, particularly for those who are interested in conducting longitudinal research.

Future Research

We hope to be able to explore further how design work and LibQUAL+TM' data can enhance the quality of library and information services.

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# The Librarian Has Left the Building: Embedded Librarians Roxana Theodorou

Head Librarian, Hellenic American University, Greece

**Abstract:** The library is the natural habitat of librarians. Or at least that is the mainstream view of things. Until very recently, librarians where always examined in conjunction with the institution they worked for, and more importantly the Library of the institution they were employed by.

Of course, that was perfectly natural, up to one point, as librarians, the gatekeepers of information, which was all produced and stored in printed or at least tangible materials, had to have a "base". A place where all of their lives' work would be safely accommodated.

Of course, the Internet, among other disruptions, made the Librarian adapt to the new environment. Of course, Libraries still exist, and try to prosper, but the fact is that information does not have to be carried in any tangible form any more. And that makes it versatile, and, more importantly mobile. Also, information is ubiquitous. Readers do not have the same need for libraries as they used to. They can access information from everywhere, their homes, their work, in restaurants, in trains and buses.

Of course, although this is not as a widespread notion as librarians would like to, the fact that the amount of information available rises, makes the Librarians even more important. And so, Librarians, themselves, have become mobile. Or at least more mobile than they used to be.

Nowadays, there are a lot of initiatives that take librarians out of the libraries and place them where there is an actual need of assistance and consulting. There are institutions that have designated the role of the "personal advisor" to librarians, whose role is to help students, for instance, with information problems. Others similar implementations are

being vigorously discussed in the academic community, in order to find the best role for Librarians, in the digital age, one that takes advantage of their expertise and focuses on the increasing need for information specialists.

This paper tries to explore some of the existing implementations of the "embedded librarian" and also offer some alternative ideas to further this idea. It will revolve around the idea that the most important assent of the Library is not the collection rather than the professionals working in it. And in that sense, the Library maybe, in some aspects obsolete, or in need of reinventing, but Librarians, remain an integral part of the learning process, whether formal or informal. The embedded librarian is an innovative practice, so simple in its core, but one that truly offers added value to the services of a very "traditional" and very challenged occupation.

**Keywords:** Embedded Librarian, Digital Information, Information Literacy, Librarianship, Teaching, Learning Process

# Librarians in Evidence-Based Medicine: The Case of Nigeria *Uju E. Nwafor-Orizu*<sup>1</sup>, *Victor Nwachukwu*<sup>2</sup> and *Ebele Anyaoku*<sup>3</sup>

<sup>1,3</sup>Medical Librarians, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria

<sup>2</sup>Lecturer, Department of Library and Information Science, University of Nigeria, Nsukka, Enugu State, Nigeria

**Abstract:** The struggle to tailor medical practice based on evidence has put librarians on their feet. Yet, Medical Librarians are integral part of health information dissemination circle. To remain relevant in this direct life-saving concept, librarians must continue to play leading roles. It seems librarians in developing countries have greater challenges here, considering the low level of ICT compliance in their libraries. This paper examines the present situation of how librarians in Nigeria are assisting in the implementation of evidence-based medicine through the libraries in their institutions.

# Library and Information Science Research in the Middle East and North Africa: A Content Analysis of Recent Publications Josiah Mark Drewry<sup>1</sup>, Amanda B. Click<sup>2</sup>

Abstract: We will present a study of the recent evolution of the field of LIS and its current state in the Middle East and North Africa, as shaped by researchers and

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practitioners across the region. We seek to address the following questions: What kinds of scholarly conversations have Middle Eastern and North African practitioners of LIS been having with each other, especially in peer-reviewed journals in Arabic and English? What kinds of empirical research have they been conducting? Are they addressing the recent political and economic upheaval in the region, and what of value can we relay of these discussions to interested academics outside of the field? Are the trends in research and publishing in LIS across MENA reflective of trends across the global library and information landscape? We will begin by compiling an index of publications by LIS scholars and practitioners across MENA in both English-language and Arabic-language journals from 2000-2013. We will start with the most highly-cited peer-reviewed journals and will work our way through a representative sample of other sources if more data are needed, including conference proceedings, monographs, edited volumes, digital repositories and newsletters. We hope that our research will enable us to address some other questions, not just about what is being studied, but how and by whom, including: Do LIS professors and other practitioners across MENA study the same issues? Do they collaborate with each other? How connected are these researchers to other practitioners across their region and the world? How often are they cited, and where?

## Library and Traditional Content Services Profile of Preservation of Minangkabau Manuscripts

#### Yona Primadesi

Padang State University, West Sumatera, Indonesia

Abstract: Classical text of Minangkabau stored in the text and in memory of Minangkabau society. Text stored in the script is written with Arab-Melayu srcript. The manuscripts are mostly stored in the library of Leiden University and just a little is stored in Indonesia especially in the community library of text owner, traditional society, public library, archieve institution, and museum. The local goovernment had tried to do persuasive approach with Netherland government and traditional society as the script owner and connected institution in order to preserve old manuscripts, both physic and information value. Preservation that had been done such restoration, transformation, transliteration, and revitalitation of those manuscripts. Especially for literature text of "kaba" genre that is kept still inside the memory of the old one, on definite occasion is conveyed on traditional performances succh bakaba (barabab), badendang, barandai performance and so on. The writings are now many on revitalisastion works, is written by memory of the writers (written kaba version). The other shape of kaba story text preservation is contemporer genre of drama such story transformation and values that try enwaken thhe rationality of its lover in enjoy it. This is in one side weaken the text image, the old culture values in society perspective. But on the other side it motivates the society especially the young ones re-learn the ancestor culture that had been norm in old society, and they can make opinion of which value would be continued by the next generation.

Keywords: Manuscripts, Restoration, Transformation, Transliteration, Revitalitation

### Library Cooperation among Academic Libraries in Katina State: Problems and Challenges

Mudassir A. Abule, Badamasi B. Mohammed

Umaru Musa Yar adua University, Nigeria

Abstract: This paper examined the library cooperation among Academic Libraries in Katsina State, Nigeria, and the existing problems and challenges. The main objectives of this study were to find out the types of cooperations that exist among the libraries and the terms of agreement in the cooperation if any. Other objectives also were to identify the kinds of resources shared in the cooperation among the cooperating libraries, and the benefits derived by these libraries. A qualitative research method was adopted in carrying out this study. Interview was used as research instrument for data collection. The population of this study was Katsina University, Katsina, Umaru Musa Yar'adua University, Katsina, Federal University Dutsinma, Federal College of Education, Katsina, Hassan Usman Katsina Polytechnic, Katsina, Isah Kaita College of Education, Dutsinma, and Yusuf Bala Usman College of Legal and General Studies, Daura. A purposive sampling technique was used to draw the sample size for this study. The Subjects for this study were the acquisition librarians of the cooperating libraries. The findings of this study have shown that there was library cooperation in existence among Academic Libraries in Katsina State, even though there was no single programme that bound all the institutions at the same time. The type of cooperation in use was commonly interlibrary lending, provision of access to library resources and services to both the staff and students of the institutions by referral services on mutual understanding between the cooperating libraries. The major problems and challenges as identified were lack of written agreement among the cooperating libraries, poor funding of the libraries, inadequate resources, lack of ICT Infrastructure (network connectivity, digitization and professional experts etc). Other problems include inadequate storage facilities, lack of support from Heads of the institutions and erratic power supply. The paper came up with appropriate recommendations such as provision of written agreement among the cooperating libraries, provision of adequate funds by parent institutions to their libraries, provision of ICT infrastructure among the cooperating libraries, supporting the library cooperation programmes on the part of the heads of the institutions and provision of alternative power supply. These could be used to address the identified problems and challenges.

# Library Professionals' and Partners' Implicit Principle of Noninterference and Writing-related Interventions

Juha Kämäräinen<sup>1</sup> and Jarmo Saarti<sup>2</sup>

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<sup>&</sup>lt;sup>2</sup>University of Eastern Finland Library, Finland

**Abstract:** Division of labor and related barriers between experts of subjects and library professionals in shared writing-related tasks are discussed to identify ways to utilize the potential of collaborationist and interventionist approaches. Generally, it is accepted that the orientations of library professions are built on metainformation: building information by library professionals is mostly done through descriptive, but not creative and substantial processes and thus limited to metainformation. This setting is depicted here as the principle of non-interference. It seems to manifest "natural" and conservative division of labor.

However, in current higher education settings the environments of project-based education and R&D activities require efforts to build bridges between various views on relevant and valid information holders. The interventions by library staff, teachers and R&D staff could be designed and implemented fruitfully combining the means and understanding of information seeking and management with the process- and goal-oriented views on writing.

Conceptual tools from Greimas's generative trajectory theory are combined with Engestrom's activity-theoretical models of expansive learning. The contradiction between creating and describing information holders are reified in terms of actantial roles and further made explicit as prevailing discourses that limit library participation. We propose, that developing interventionist professional profiles linking capabilities in teaching, R&D and information management as well as the cultural competence gathered in higher education institutional libraries would allow participation in creating such knowledge artifacts.

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## Library Use, Collections and services of M. Tech. and Research scholars of Zakir Husain Engineering College, Aligarh Muslim University, Aligarh: A Case Study

Md. Imran Ahmad

Aligarh College of Education, India

**Abstract:** This paper is to examine the find out of library use, collections and services among the students of engineering at Aligarh Muslim University, Aligah (AMU). A survey was designed to collect needed information about the level of usage of library collections, services and satisfaction of users. A well-structured questionnaire was circulated among the research scholars and postgraduates categories to collect the necessary primary data, keeping in mind the objectives of the study. The findings clearly reveal that the majority of users of the library used the circulation and reference services. The study found that a majority of research scholars consult the reference books and journals for research work followed by post graduate students who used the library circulation service. The present paper consists only College of Engineering users and the geographical area is restricted to the Zakir Husain Engineering College library at the Aligarh Muslim University, Aligarh. The scope of the paper could be extended to additional Central, State, Deemed and prive universities in India. A comparative study

could also be made between university libraries and information centres for usage of library collections and services. There are a number of studies on usage of library collections and services, but this is the first of its kind within the Zakir Husain Engineering College of Science and Technology in Aligarh Muslim University, Aligarh. As such, it should pave the way to fulfill the demand of users in the AMU, Aligarh, as well as State, Deemed, and private universities.

**Keywords:** Library use, Circulation, Reference service, Collections, Services, Aligarh Muslim University

## 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 researchers (Non-Native English Speakers) must consider to confirm, modify or change their research papers and trends. A 3D schema that allows information users be aware of their Information Retrieval position, regarding failure/success, is shown.

**Keywords:** Information Retrieval, IR, Controlled vocabulary, Natural language Information Systems, Linguistics, Lingstorm, Semantics, Infopragmatics, Pragmatics

### Linked Data in Libraries: Witnessing through Published Literature and Research

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**Abstract:** We live in the information age where no information environment, including a library, can provide efficient services without using the World Wide Web for access and delivery of the sources available in its digital collections. However, the bibliographic and full text information in libraries is sometimes neither published on the Web nor interlinked to improve its accessibility. Libraries have hidden treasures of information and knowledge that need to be uncovered using the emerging Semantic Web and Linked Data techniques. Linked Data is an approach to publish and share data on the Web by using the four principles of Linked Data. The term Linked Data was coined by the Web pioneer Tim Berners-Lee in 2006 and gained popularity in the last seven years in a variety of fields and sectors including, but not limited to, life sciences, government organizations, cultural institutions, and libraries. According to Berners-Lee, although the

Internet was originally envisioned to enable a semantically linked Web of data, this goal was not made technically feasible until the last decade or so.

The key aspect of Linked Data involves publishing structured data on the Web by using Resource Description Framework (RDF) and interlinking these data items from different external data sources through RDF. When data is published on the Web and interlinked, a single global data space, the semantic web, is created. The basic assumption behind Linked Data is that the value and usefulness of data increases by linking it with other data.

The Web has seen an evolutionary change from Web of Documents (hypertext) to Web of Data (Linked Data) in the last two decades. In the 1990s, documents on the Web could be accessed using HTML or Web browsers while today's Web of data can only be accessed using Linked Data (LD) browsers. LD browsers facilitate users' navigation between different and scattered data sources by providing RDF links. Library data has the potential to be transformed into Linked Data. In fact, the W3C Library Linked Data Incubator Group already showed some initiatives of Linked Data in Libraries.

Although Linked Data is an emerging concept, it has the potential for enabling libraries to publish and interlink their hidden data on the web for better global accessibility. In order to obtain an erudite insight on the state of shared mindset of researchers' effort on exploiting the potential of Linked Data and Semantic Web at large, there is a need for a quantitative study on published literature. Therefore, for the obtainment of such understanding, this study uses published articles on library linked data in Library Hi Tech, Journal of Library Metadata, and Journal of Web Librarianship during the last six years (i.e. 2008-2013) to identify the potential and applications of Linked Data and associated technologies in libraries and investigate its adoption in the management of bibliographic data.

This study provides the synopsis on the state of the existing literature in the context is Linked Data adoption, and assist researchers on the agenda to have a concentrated effort to address 21st century challenges, including library information interoperability, and information assimilation and dissemination.

**Keywords:** Digital libraries, Linked data, Metadata, Resource Description Framework (RDF), Semantic Web

# Making Hard Choices: Using Data to Make Collections Decisions

#### Susan Elizabeth Edwards

University of California, Berkeley, USA

**Abstract:** Research libraries spend millions of dollars acquiring, storing and accessing collections -- but how well do the collections we build meet the needs of our users? How do we know if we are equitably supporting a wide array of disciplines on campus, and more importantly, how well we support the research mission of our institution? In order to arrive at meaningful answers to these questions, we need to go beyond simple size

measures such as dollars spent, volumes added, and number of e-journals licensed; and even beyond usage metrics such as interlibrary loan, total circulation and e-usage statistics. This paper will outline several approaches being used at Berkeley, including a citation analysis of doctoral dissertations, and how this new data is helping guide these difficult decisions.

**Keywords:** Collection development, Collections assessment, Citation analysis

# Making Maps for Campus Collaborations *Kate Dougherty*

University of Arkansas, USA

**Abstract:** The growing emphasis on data visualization among researchers, librarians and the general public is proving the old adage that a picture really is worth a thousand words. Visualization through charts, infographics and maps can add value to data by conveying information more quickly and providing new perspectives. As information stewards, librarians are well-positioned to help their patrons and institutions with data visualization projects like creating basic maps, and many academic libraries are already doing so.

This session will describe a collaborative Google mapping project between the University of Arkansas Libraries and the University's Office of International Students and Scholars (OISS). Using data on the number of current international students by country of origin provided by OISS, we created a graduated color world map visualizing this information with Google Fusion Tables. The resulting map has been embedded in a web page on the OISS website and displayed on a large touch-screen in the student union during International Education Week. This presentation will give step-by-step instructions for easily creating such maps - a service which libraries might offer as a basis for campus outreach and collaborative projects.

Keywords: Maps, Data visualization, Collaboration, Outreach, GIS

# Managing Health Information on the Internet: Key Issues and Methods for Librarians and Public Authorities

#### Adrian Staii

Maître de Conférences HDR, Associate Professor, GRESEC, University of Grenoble-Alpes, France

**Abstract:** Health information is today a key issue in advanced societies (Staii, 2012). The information sources have kept diversifying over the years (Marchetti, 2010): traditional media and the Internet provide nowadays open access to information produced

by medical authorities, public institutions, pharmaceutical and food industries, associations and individuals.

In France, recent surveys show that over 37% of the population search health information on the Internet (CREDOC, 2011). This situation addresses important challenges to the health authorities and to the librarians since a large part of the information accessed on the Internet is not strictly controlled by legitimate authorities.

In this paper we insist on the specificities of this issue in France. On one hand, the continuous surveillance of the health information available on the Internet is extremely complex and it lacks efficient methodologies, as shown by the limited results of the large scale programs aiming at labeling health information websites. On the other hand, many studies show that the users give limited importance to official labels since they often look for alternative forms of information (like individual testimonies and personalized advice), as shown by Clavier et al (2010). In this context, new methods have to be imagined in order to manage this highly important information.

Firstly, we analyze the major difficulties of managing health information on the Internet (with a particular focus on the methods available and on the users' practices). Secondly, we formulate two major stakes and we propose some solutions for the librarians and the public authorities. On one hand, we insist on the necessity to develop selective and reactive methodologies (Barr, 2011). On the other hand, we discuss the importance of improved communication and education policies in order to help users get in-depth understanding of the specificities of health information and improve their search techniques (Eysenbach and Köhler, 2002).

Since the general supervision of all information sources online is inefficient, we propose here to focus on some strategic media (like the search engines, the social networks and some major discussion forums) in order to identify in real time key health topics and information risks from the users' standpoint (Scanfeld et al, 2010). This approach could be useful both to manage sanitary crisis, to respond to misinformation by reactive communication actions and to better understand the users' priorities and practices on a long term.

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# Managing Research with a New Approach "Introducing Reliable and Efficient Performance Indicators in Academic World"

#### Tayfun Basal, Gultekin Gurda

Turkey

Abstract: Universities are in a though competition to attract best students and researchers and increase their share of funds. Innovation and entrepreneurship are also key concepts within the context of this competition; therefore, research administrators have several questions to answer in order to catch up with the increasing global competition around academic world. How to manage the limited resources of an academic institution better while evaluating the researcher performance still with objective metrics is one of the most important ones to address. Introducing performance indicators that are capable to reflect the true performance and also drive the success of the academic institution remains to be a challenging topic. In this paper, we propose some quantitative and qualitative indicators based on assessment of scholarly outputs of Turkish universities for the last 5 years. Main focus is conducting a base frame work that is useful as a consultative guide for research administrators. We have tested different universities as an example to see whether suggested indicators makes sense and tried to understand how do variations like total researcher population, different departments available and age of institution impact the results. The results obtained are promising and demonstrated that efficient use may further contribute to scientific success of an institution.

# Management Excellence and Innovation – INELI. Who Are the Library's Customers in 2020?

#### Jasmina Ninkov

Director, Belgrade City Library, Serbia

**Abstract:** Customers will not change outstandingly during the next six years, but there will be more customers who need help to survive in society. When most services are changing rapidly to self-service and people also need more technology skills for daily routines, libraries will be places to get help. Also totally new library services, such as Makerspaces will bring new kinds of customers. Social role of the library will be in the following years dominate according to the todays cultural or educational role. Public library leaders around the world are facing unprecedented challenges, and this turbulent environment offers a unique opportunity for public library leaders to redefine what it

means to be a public library. Peter Drucker says "the greatest danger in times of turbulence is not the turbulence; it is to act with yesterday's logic." The Global Libraries initiative (GL) of the Bill & Melinda Gates Foundation believes that the most effective way to ensure that emerging library leaders don't act with yesterday's logic is to provide them with opportunities to connect with each other to explore new ideas, to experiment with new services, and to learn from one another. This will result in a network of leaders from around the world who have a shared vision of what public libraries in the twenty-first century can and should be and have the skills they need to implement that vision in their respective countries. Innovation skills became very important part of management and have to be develop.

# Managing Risk in Information Resources and Services Provision in University Libraries in Nigeria

#### Lawal Umar

Umaru Musa Yar'adua University, Nigeria

**Abstract:** Risk management forms an integral part of the Library's planning and monitoring process and its internal control framework. It is therefore a vital element of good governance and management. This paper discusses the strategies for managing risks in the provision of information resources and services in University Libraries in Nigeria. The concept of risk and risk management were highlighted. Risk is defined as any impediment to accomplishing university library's goals of providing relevant and timely information resources and services. Strategies for managing risks such as risk avoidance; risk assumption; risk transference; insurance etc were discussed. The study concludes that the focus of risk management is the identification and treatment of risks to organizations. Its objective is to add maximum sustainable value to all the activities of the organization and to increases the probability of success, and reduces both the probability of failure and the uncertainty of achieving the organization's overall objectives.

# Marketing Assessment and Measurement: In Context with Panjab University Library, Chandigarh, India Raj Kumar

Panjab University, India

**Abstract:** In recent years, with advent of new technologies the products and services provided by libraries have changed considerably, now the librarians and information professionals have challenge for enhancing the use of their resources and services. Marketing of information services in any library is most significant in a competitive environment. The application of Email, Internet and social networking sites are quite radical and dynamic in marketing of information services. The Panjab University Library has an impressive array of electronic and print resources available to users. The library feels the need of marketing of their products due to some obvious reasons like increased

competition from other sources of information such as the Internet; changes in educational system; information seeking behavior and increased usage of information technology. In contrast with the business and commercial sector, the potential of paid social network advertising has received scant attention from professionals working in non-profit making organizations like libraries. This paper highlights the aspects and study of the Panjab University library on the need, information literacy and marketing strategies adopted by the library.

Keywords: Marketing, Information literacy, Information services

# Measuring Satisfaction of Children and Adolescent Users Dr. Simona Maria Antonescu<sup>1</sup> and Dr. Octavia-Luciana Madge<sup>2</sup>

<sup>1</sup>Associate Professor, Department of Information and Documentation Sciences, Faculty of Letters, University of Bucharest, Romania

**Abstract:** Measuring satisfaction of children and adolescent users towards the documentary structure can prove misleading. The criteria by which they measure satisfaction are not "objective" (to the extent to which indication of satisfaction can be an absolutely objective process), but depend largely on their level of competence and the expectations that children and adolescents have towards the documentary structure. Our study aims to process and analyze materials gathered between 2011-2014 by full time students and students already working as librarians or documentary teachers. Our conclusion is that documentary structures for children and adolescents must create complex specific standards, substituting also the lack of experience of their users. User education is the first task of the documentary structure. The study also provides some suggestions on these points.

**Keywords:** Children and adolescent users, Documentary structure, Satisfaction criteria, User education, Romania

### Measuring the Performance of Databases to Support Acquisition Decisions for University Libraries: A Case Study in Taiwan 1021219

#### Mei-Ling Wang

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**Abstract:** In the 21st Century, many university libraries in Taiwan have purchased a variety of electronic resources, forming a new paradigm for collection development, but libraries have also encountered serious problems in the shape of insufficient funding and user dissatisfaction. When database procurement and deleting decisions are made most

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university libraries hope that database evaluation can be undertaken to support acquisition decisions and electronic resource promotion services, as well as to understand information behavior of users. With respect to university library database selection and procurement, this study discusses how to construct database performance measurement indicators and models and apply them to support database purchasing decisions. The main aims of this study are: a. to investigate factors influencing the university library database acquisition decisions; b. to explore database performance indicators relating to procurement operations; c. to explore how to construct database performance evaluation models and to apply them in support of university libraries purchasing decisions; d. to compare the effectiveness and suitability of performance evaluation models applied in support of university library database purchasing decisions.

This study used the case study method and the evaluation research method; the electronic journal procurement operations of the National Chengchi University Library in Taiwan were the subject of empirical study. The objective was to use performance evaluation models to assist database ordering and deleting decisions. The researcher constructed the electronic journal database performance indicators and performance models used in this study with reference to Wang's "University Library Electronic Resources Performance Indicators and Evaluation model" (2013) using the Delphi method. The electronic journal performance indicators in this study are composed of three dimensions including cost, resources, and usage, with eight indicators. Cost indicator refers to database price; resource indicator relates to the number of journal titles and number of journal articles in the e-journal database; database usage includes login connection, search, download, views, and total usage. In the first stage, the study collected data come from the ten electronic journal databases purchased by National Chengchi University Library in 2012, according to the above eight database performance indicators collecting data relating to database costs, resources, and usage. In the second stage, the performance evaluation and ranking was undertaken using six performance evaluation models, including costeffectiveness, performance measurement general model, efficiency, KPI indicators, emetrics measurement and JUF (Journal Usage Factor). The performance data from the ten e-journal databases was then calculated. Finally, the ten electronic journals were ranked based performance evaluation to support database purchasing and deleting decisions.

The findings of this study prove that these database performance indicators and six performance evaluation models can be effectively applied to support database procurement or deleting decisions. In particular, the cost-effectiveness model and the performance measurement general model are most suited to support university library electronic journal purchasing decisions. The study provides university library electronic resource performance evaluation analysis to support acquisition decisions. It is recommended that future research include e-books database evaluation based on the electronic resource performance indicators and evaluation models proposed by the study. **Keywords:** Electronic Resources, Database, Performance Measurement, University Libraries, Acquisition Decisions

Measuring Usage of the Printed Collection in a Noncirculating Design Library: An Evidence-based Multidimensional Evaluation Songphan Choemprayong<sup>1</sup> and Lerchart Thamtheerasathian<sup>2</sup> <sup>1</sup>Lecturer, Department of Library Science, Faculty of Arts, Chulalongkorn University, Bangkok, Thailand

<sup>2</sup>Knowledge Management Specialist, Design Resources Center, Thailand Creative and Design Center, Bangkok, Thailand

**Abstract:** Reshelving statistics has been used extensively as a proxy to measure the use of a non-circulating collection, particularly for reference collection management in academic libraries (e.g., Engeldinger, 1990; Colson, 2007; Bradford, 2005; Welch, Cauble, & Little, 1997). Relying on reshelving method alone may raise concerns in terms of representation validity since use is perceivably underestimated (Biggs, 1990). Additionally, reshelving method may not directly indicate the usefulness and/or relevancy of a material (Kessler, 2013). This paper incorporates other usage activities, including photocopying, scanning, bookmarking, and viewing a bibliographical record in an online catalog, into account.

The study took place at Thailand Creative and Design Center's Resource Center, a non-circulating members only library specializing in arts, design, and creativity located in Bangkok, Thailand. The main objective of this study is to investigate the extent in which the printed non-circulating collection has been used during a five year period, January 2008 to December 2012. This paper also aims to assess the possibility of incorporating other usage statistics, in addition to reshelving method, to evaluate the usage of a non-circulating collection in.

The data collection methods are varied according to different data sources. Reshelving counts were collected from an in-house application. Photocopying record was gathered from photocopy request forms. Scanning transaction logs were collected from an in-house application using at the self-scanning station. The transaction logs of the online catalog use were collected for bibliographic record viewing activities. The bookmarking data was collected from an in-house service application. TCDC Resource Center has developed a bookmarking system where the library provides bookmarks to users upon request. Once request, a bookmark is linked to a user record. After collecting the material, shelving staff has to record the location of bookmarks, if any, where they are found in the material. The analysis utilizes univariate and bivariate statistics to describe the distribution of use and the relationship between results from different methods.

The results of this study show that including multiple data sources to evaluate the use of a non-circulating printed collection is possible and enhances the understanding of use. Nonetheless, interpreting the results is challenging and should be cautiously aware since different methods have diverse contributing factors associated to the reliability and validity.

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# A method for measuring satisfaction of users of digital libraries: a case study with engineering faculty

Beatriz, Valadares Cendón<sup>1</sup>

Abstract: This research study proposes an instrument and method for measuring the satisfaction of users of digital libraries of e-journals. The method was tested verifying the degree of satisfaction of engineering faculty who were users of the Brazilian CAPES Portal of E-Journals. The population studied came from 17 federal universities from all 5 geographic regions of Brazil. Data was collected by mean of a web-survey. The satisfaction questionnaire, answered by 544 engineering faculty, had questions on an eight point Lickert Scale about the various factors which affect the satisfaction of the user with the Portal. These questions which were fundamented on user studies of digital libraries, on the literature of computer science and administration of information systems, included general questions on the satisfaction of the users; and satisfaction with specific aspects of the quality and the content of the system. Satisfaction with the quality of the system included questions on the search resources, the usability (ease of use, flexibility. readability, organization of information, sequence of the screens), and the access to the system (ease of access, speed). Satisfaction with the contents of the system included questions about the number of journals, their quality, their relevance, chronological coverage, up-to-datedness, reliability and availability of full text). A method and instrument was developed, adapted from Bailey e Pearson (1983), who defined satisfaction as the sum of the user's, positive or negative reaction to a set of factors. The method, besides making it easier to compare satisfaction among different areas of knowledge or among different categories of factors, allows the normalization of results to neutralize the impact to null responses. The analysis of the results shows that the engineering faculty in general is satisfied with the Portal but the Portal should invest more in the number of journals, in their interface and their search system. Training of users and librarians on the use of the Portal is recommended.

**Keywords:** User satisfaction; User studies; Evaluation of digital libraries, E-Journals, Methodology

# Methods to Teach, Learn, and Develop Information Literacy in Future Librarians

Celia Mireles Cardenas, Autonomous University of San Luis Potosi, Veronica Soria Ramirez, Autonomous University of San Luis Potosi & National Autonomous University of Mexico

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**Abstract**: Several qualitative and quantitative methods used in subjects directly related with Users Education and Informational Alphabetization for students of Library Studies at two Mexican universities are exposed with the aim that obtained results may be a referent in other contexts. The study begins with a general description of the subjects, then, methods used and obtained results are analyzed. Finally, a consideration about the relevance of applying models from Informational Alphabetization itself, so students utilize mentioned skills in their academical-educational processes, recognizing their significance as an essential practice throughout life.

Keywords: Informational literacy, Education methods in informational alphabetization, Users education

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# A Mixed Methods Evaluation of a LIS Leadership Programme in South Africa

#### Genevieve Hart

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Abstract: The proposed paper will report on the authorB's evaluation of the three-year nationwide leadership programme of the Centre for African Library Leadership (CALL), an initiative of the University of Pretoria Library (UPLIS) and of the Carnegie Corporation in New York, which has in the last few years supported many LIS projects in South Africa. Six two-week so-called Leadership Academies were run by the Centre from July 2009 to April 2012, with 20 delegates per course; these were followed by three one-week Train-the-Trainer courses for selected alumni of the academies. The goal was to develop leadership qualities in current and future library managers in the academic, public, and national library sectors in South Africa - amid concern over the challenges confronting a new generation of LIS leaders. The brief of the evaluation was to: ascertain the realization of the goal and objectives of the CALL project; determine the impact of the Academies on participants, their institutions and the broader LIS sector; and to assess the relevance of the Centre for African Library Leadership (CALL) and its continuance. Data were gathered through:

- An anonymous online questionnaire survey of all 108 alumni of the six CALL courses.
- Interviews with the UPLS Director, the CALL Project Director and Programme Coordinator.

- Three focus group interviews in Cape Town, Johannesburg and Pretoria with CALL alumni.
- Two focus group interviews in Cape Town and Pretoria with Train-the-Trainer alumni.
- Examination of project documentation, website material, CALL course evaluations, etc.

The paper will focus on the methodology rather than on the findings - hoping to demonstrate the benefits of triangulating the questionnaire data with the follow-up focus group interviews. The debates and discussions within the focus groups lent support to the survey findings but offered more nuanced insights. For example, they highlighted how the distinctive emphasis on self- development and self-awareness in the Leadership Academies and the Train the Trainer courses served to cement the learning.

Keywords: South Africa, Leaders, Leadership education, Evaluation

### A Model of Reading in Academia: Relationships among Academic Tasks, Information-seeking Stages and Reading Strategies

### Deanna Sessions and Storey Sitwala, Pratt Institute

**Abstract:** The paper will report on one dimension of the larger study, "Exploring the use of e-books: an investigation of reading habits and practices in academia," that explored academic reading and working habits in the digital age. The larger study was conducted at four New York-based universities and utilized a mixed-qualitative and quantitative methodology to collect a rich body of data on undergraduate and graduate students' reading habits as well as strengthen the validity of our findings. Data collection methods used in the study included an online diary; semi-structured interviews; observations; and an online questionnaire. The study design was informed by models of human information behavior (Ellis 1989, Kuhlthau 1991, Foster 2004), pedagogical theories of reading (Adler 1998, Holschuh 2000, Hubbard & Simpson 2003, Roberts & Roberts 2008, Liu 2010), and the literature on the adoption and functionality of e-books and e-readers (Lopatovska et al 2013). This paper will examine the relationship between academic tasks, information-seeking strategies and reading behaviors. It will report on findings drawn from an online questionnaire and observations. It will explore the relationship among the following constructs: information needs; information-seeking task; types of information resources used; reading behaviors; specific uses and preferences for information devices and their features. The findings have led to the development of an academic reading model that describes the relationships among academic task, information-seeking actions, reading strategies and associated sentiment.

Our findings indicate the presence of relationships among an individual's academic tasks, reading and information requirements, information-seeking strategies and reading styles. Furthermore, the paper will also discuss how these relationships develop at different temporal stages of the information seeking process. For example, participants have reported that in the early stage of writing a brief report (academic task), they are identifying the type of information needed (information requirement to satisfy the task),

selecting information resources (information-seeking strategy), thinking about a topic, and looking for specific facts (reading strategies). In addition to proposing a model, this paper will provide insight into both the methodological challenges encountered during the study and opportunities for future studies. Findings and recommendations from this paper can inform work in several areas, including: a) education arena to inform decisions related to curriculum development; b) libraries' collection development and services decisions; c) academic publishing in relation to content development based on academic work demands and information practices; and d) software design to support diverse types of academic reading tasks and processes.

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## Modeling the Perceived Outcomes of Public Libraries in Finland

### Professor Pertti Vakkari, University of Tampere, Finland

**Abstract:** The benefits of public libraries as perceived by adults in everyday activities, in cultural activities and in career are modeled by linear regression analysis and by path analysis. The data is based on a representative sample of 1000 Finnish adults ranging from 15 to 79 years. The models include variables measuring citizens' demographics, book reading, Internet use and library use. The models explain 27 % - 32 % of the variation in the three benefit types observed. The role and the explanatory power of the factors included in the models vary to a certain extent between the benefit types.

Keywords: Public libraries, Outcomes, Models, Finland

### MOOCs! Who Gives a SWOT?

### Elaine Samwald & Linda Harasim

Collection Development & Library Research Sessions, Kwantlen Polytechnic University, British Columbia

**Abstract:** Post-secondary Education Worldwide is Currently Experiencing the Invasion of the MOOC, an Odd-sounding Acronym that Stands for Massive Open Online Courses. The concept of the MOOC, which has been variously viewed as the prodigy child or evil spawn of Courseware + the Web, went viral in 2012 and by 2014 gained geographical ubiquity: universities in North and South America, Europe, the middle East, Africa and Asia are grappling with its potential opportunities and threats. Since it has become such a "hot topic" with potentially huge impact on multiple facets of universities and their libraries, this is a good time to step back - and SWOT.

To gain perspective on the situation, we will examine MOOCs from a traditional business point of view using the SWOT tool. SWOT is an acronym for Strengths, Weaknesses, Opportunities and Threats. Primarily employed as an assessment technique, SWOT analysis is popular because it narrows the focus to a simple, elegant four-cornered analysis. This can often provide a balanced overview of a complex situation. Many would describe MOOCs as a business model instead of a pedagogical model, so this method of analysis might be particularly apt.

We propose a presentation that brings together an international leader in online education and a front-line academic librarian. Together we will consider issues, implications and impacts of MOOCS on universities and their libraries using the SWOT template as a simple but effective mechanism to discuss the realities and potentialities of MOOCs.

We feel it is imperative that librarians, faculty, students and administrators gain a perspective and understanding of the MOOC phenomenon. This is especially important given the potentially disruptive and destructive changes to public postsecondary education and by extension to our libraries. The combination of rapid adoption without thorough examination of all the implications heralds massive changes to pedagogy. We wonder if we are witnessing a new way of learning or new way of making money?

### One More Criteria to Evaluate Library Electronic Resources: Comparing Three Law Electronic Resources and Three Economic Resources

### Nuno Henriques

Catholic University of Portugal, Portugal

**Abstract:** Presently, all university libraries subscribed electronic resources that provided thousands of ejournals and ebooks. For users and librarians, the advantages are abundant and obvious. The challenge is the selection and evaluation of these electronic resources, such always happened to print collections.

Normally, one of two arguments, or both combined, are used to renew or cancel an electronic resource library subscription: the financial argument; and the usage statistic argument.

In this study we propose new criteria for libraries, within the quality evaluation and management. Exploring, as case study, three main law and global electronic resources and three main and global economic electronic resources we will apply a set of axes (dimensions) and requirements suggested by the scientific literature to the websites evaluation, adopting, internally, four dimensions: accessibility, information, navigability and presentation. The result of this study will be a quality checkbox evaluation, as a tool, to evaluate or select one or another electronic resource, particularly when subscription prices and content are very close.

In 2013, the European Documentation Centers (EDC's) Network made 50 years. In the first 40 years, EDC's had a decisive and exclusive role, as print EU documentation repositories, providing specially to students, researchers and professors, all EU institutional, scientific and technical information needed. EDC's had human presence, sound user needs and academic satisfaction.

### Moving Toward to Next Generation Institutional Repository System

### Wen-yan Huang

Division of University Archive, National Chung-hsing University, Division of University Archive, Library, Taiwan

**Abstract:** The purpose of Institutional Repository (IR) is to preserve, manage and disseminate the works done by affiliated members, and further to enhance the visibility of the research outcomes in an effective manner. However, there have been issues that IR managers have encountered, such as proper metadata that could support describing, searching and representing various collections, mechanism for materials collecting, name authority control, etc.

National Chung-hsing University Library implemented IR system (NCHUIR) in 2009. From year 2009 to 2013, there were 39,218 items have been collected and 66,814 metadata be created. Members of University Library have overseen the operation of NCHUIR since. Issues with system operation have been observed throughout those years. The author took action research approach, 5-step Plan-Act-Reflect model, and worked with other library members to identify, propose solutions and solve problems to elevate usability of IR system.

The aim of this paper is to share the process, solutions proposed and outcomes of implementation. The strategies the library team took to standardize the workflow and improve the usability of IR system including (1) interface for material collecting, such as journal articles, technical reports, patents, conferences papers and dissertations/theses; (2) standard operating procedure for information process, including materials uploading, de-duplicating, metadata creation, and classifying; (3) value-added services, such as outlink to information objects via SFX, providing reviewed information, such as impact factor value from WOS, and bibliography packaging by incorporate bibliographic information with EndNote; (4) name authority control for affiliated members on individual and department levels, including unifying various forms of names, and

standardize translations. Reflection and further plan for NCHUIR are also discussed in this work.

### Moving Towards Better Qualitative Evaluation of the Impact of Libraries

### David Streatfield<sup>1</sup>, Sharon Markless<sup>2</sup>

<sup>1</sup>Principal, Information Management Associates, UK

Abstract: This paper explores the emergence of impact-focused qualitative evaluation in libraries and its relationship to other forms of evaluation. The authors describe the emergence of library evaluation from its management development and educational research origins and show how changing priorities in international development evaluation have influenced recent work in the library evaluation field. They then set their UK national and international efforts over the past decade, aimed at enhancing understanding of impact-focused evaluation and at enabling library managers to undertake qualitative evaluation themselves, within this broader international context. In making these connections they draw on their own published work, including their book on library impact evaluation as well as their experience in several countries as independent impact consultants with the Global Libraries Initiative of the Bill and Melinda Gates Foundation and their consultancy work for the International Federation of Library Associations and other international bodies.

They examine some key features of library evaluation, concentrating on school, higher education and public library developments, and point out why large-scale library impact evaluation is particularly difficult and challenging when compared to evaluating some other national and international development interventions. They go on to explore some of the issues that need to be addressed when attempting to move beyond quantitative evaluation approaches towards engaging with the impact of library services on their users and communities. Finally, they consider some of the problems, challenges and opportunities offered by attempts to combine qualitative and quantitative research methods when seeking to evaluate the impact of library-based community interventions and library services.

This paper is envisaged as a contribution to the special session for QQML 2014, sub theme 24. Museums, Libraries and Cultural Organizations: Collaboration of cultural organisations towards quality and impact: the difference that the cultural institutions can make.

# How Much Value Do Libraries Add to a Degree? A New Approach Using a Controlled Experiment and Odds Ratios

### Dr. Ian Rowlands

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**Abstract:** Previous studies by Graham Stone and others at the University of Huddersfield have demonstrated broad statistical associations between proxies for library use and degree class outcomes. Data collected for students at eight British universities has recently been made openly available through the auspices of the Jisc Library Impact Data Study, allowing further secondary analysis to be carried out. This paper takes a slice of that Jisc data for 1,809 students in business and management studies and directly compares sub-populations of library non-users (the control group) and intensive users (the test group). This allows a different statistical approach: rather than looking for correlations, we can ask a more immediate question: does the library make any difference?

Library usage data are very heavily skewed (approximately log-normally) in favour of a small minority of heavy users and this has implications both for reporting library use statistics and for designing studies. For example, correlation coefficients are highly sensitive to the presence of even a small number of outliers. Using a one-way analysis of variance test on log-transformed data, we find significant differences (at p < 0.05) between degree outcomes and library turnstile activity, loans, and e-resource use respectively. We then attempt to quantify the 'library value added' by calculating odds ratios. The findings suggest that access to e-resources in particular is a good predictor of degree class outcomes. This study design removes some (but not all) of the uncertainties around causality and direction that make correlational evidence so difficult to interpret.

### Multi-Methodology in Library Research: Using Mixed Methods to Examine Evolving Researcher Needs in the Digital Humanities

Thea Linquist, Holley Long, and Alexander Watkins

University of Colorado Boulder, USA

**Abstract:** This presentation will discuss the advantages of using multiple methodologies to gather information, arguing that these multiple perspectives can lead to broader and more holistic knowledge. As a case study we will present the University of Colorado Boulder Libraries' Digital Humanities Task Force's 2013 investigation of changing Digital Humanities activities and emerging support needs on campus. The task force took a mixed-methods approach, employing a range of quantitative and qualitative methods in order to capture a complete and nuanced picture of Digital Humanities needs. We used qualitative methods such as interviews, participatory drawing exercises, and a campuswide symposium. To these we added quantitative methods including a survey, NVIVO coding, and environmental scans. By taking this multi-modal approach, we were able to present well-justified recommendations.

A major component of our research involved conducting in-depth interviews with 20 people from the Boulder campus. The interviewees were asked about their Digital Humanities research and teaching practice. We also asked them to draw their Digital Humanities process and indicate where they could use further support. This exercise often allowed the subject to clarify their thinking, summarize and synthesize the answers they gave during the interviews, and pin-point their most pressing needs. The interviews were coded using NVIVO qualitative data analysis software to help uncover patterns in

interviewees' responses such as the barriers most frequently brought up, the methodologies that were most popular, and which services were most desired.

The other major component was a campus-wide survey of faculty, graduate students and other researchers from across disciplines. The survey asked similar questions to the interviews, but from a broader audience. We received over 340 responses that allowed us to compare and contrast the survey and interview results to ensure that data points generally matched and that interviewees were not unrepresentative of the campus community as a whole. This method allowed us to make recommendations on the strength of the survey data, with the nuance and detail expressed in the interviews. The survey also proved the best method for getting responses from a wider swath of the university community, including those who are interested but not yet involved in the Digital Humanities, as well as those who are not interested in becoming involved.

Our investigation of Digital Humanities culminated in a symposium with presentations by campus practitioners and three outside experts as well as more informal, group discussions on attendee-selected topics of interest ("birds-of-a-feather" discussions). The symposium was an important vehicle for the task force to gather information about desired services, resources and partnerships, as we heard thoughts from attendees, presenters, and the outside experts throughout. Between the informal unconference-style discussion and structured presentations, we heard a multiplicity of voices on Digital Humanities issues.

The multiple methods we used enabled us to analyze and synthesize the diverse feedback we received into a well-supported report that paints a comprehensive-as-possible picture of Digital Humanities at CU. Additionally we were able to make well-informed recommendations supported by multiple lines of evidence, targeted at the most pressing campus Digital Humanities needs.

# Multiple Modalities of Assessment: Redesigning a Library Webpage for an Interdisciplinary, International audience Mara Thacker<sup>1</sup> and Lynne Rudasill<sup>2</sup>

<sup>1</sup>Asst. Prof. and South Asian Studies Librarian, University of Illinois at Urbana-Champaign, USA

<sup>2</sup>Assoc. Prof. and Global Studies Librarian, University of Illinois at Urbana-Champaign, USA

**Abstract:** The International and Area Studies Library was established in 2011, consolidating several strong area studies collections into one service point to serve an interdisciplinary, international client base. The library webpage that was launched upon the opening of the library emphasized the different area collections over the services provided by the library and as the page grew it became increasingly difficult to navigate. As a result, the IASL Reference and User Services group identified redesigning the website as a priority for the 2013-2014 academic year.

Redesigning the IASL webpage is a uniquely challenging task given the variety of languages, geographic regions, and academic disciplines represented within IASL collections and services, as well as the diverse nature of the website's target. A team consisting of two area specialist librarians and two graduate assistants administered a comprehensive, multi-faceted series of surveys and studies to facilitate the redesign. Techniques used included statistical analysis of Google web statistics, online satisfaction

surveys, card sorting exercises, focus groups, and usability testing. The end product will be a website that is intuitive, cohesive and inclusive of the diverse array of area studies collections and services managed by the International and Area Studies Library.

**Keywords:** Usability Testing, Web Assessment, Card Sort, Focus Groups, Website Design, Area Studies

## The Need to Compile a Thesaurus of Museum Materials and Provide a Suitable Plan

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National Library and Archives of Iran (NLAI), Iran

Abstract: In information retrieval and creating a link between the visitors of museum and the existing materials, we may take advantage of the thesaurus as a useful tool. Museum objects have different characteristics and features with other information sources. This influences records registration of objects in museum. Retrieval of nontextual items requires the use of specific thematic descriptors. So far, no tool has been made for content search of museum objects. Today, part of museum materials as nonbook information resources, has reached libraries and information centers. Necessity of indexing in order to have quick and easy access to these kinds of resources, in addition to museums, is being felt also in libraries. The Art & Architecture Thesaurus (AAT) and Thesaurus for Graphic Materials (TGM) comprise the descriptors used for cataloguing and accessing information related to art, architecture and culture. But these thesaurus do not include all materials existed in the museums. Iranian ancient art and culture have left a variety of museum objects to be remembered. On the other hand, due to the diversity of this class of materials, their number in museums is also on the rise. This has led to have many visitors and users. Given the above, the need to compile a controlled language in the form of a thematic system in order to indexing these materials is felt. Researchers have attempted to provide a model for Iran museums and libraries use, by examining how to compile a bilingual thesaurus with the subject of museum materials.

**Keywords:** Thesaurus, Indexing, Museum materials, Non-book materials, Museums, Libraries and information centers

Needs Analysis of Users for Development of a Veterinary Digital Library. Case of the National Higher School of Veterinary of Algiers

Prof. Radia Bernaoui<sup>1</sup>, Prof. Mohamed Hassoun<sup>2</sup>

<sup>1</sup>ENSV, Alger, Algeria <sup>2</sup>ENSSIB, Lyon, France **Abstract:** Today most libraries immigrate from computerized management to content digitization. In the digital age, libraries feel compelled to refocus their missions face a unique intangible documentary process. These are associated with an interface research and consultation documents remotely.

The scientific and technical information across the world has led to a phenomenon of globalization of knowledge through the production, visibility and dissemination of knowledge and knowledge produced by researchers and research institutions.

In this sense, Algeria is accused of having a huge delay and failure on plant and animal production, which is punishable by a dependence on the importation of various foodstuffs (milk powder, meat, cereals ...). The government has realized that the long-term solution is in scientific research that can enhance our potential (especially animal and plant resources). However, the availability of scientific information is almost vital to achieve the objectives. Thus, the digital library plays a very important role in the collection, selection, tracking, history of our research, as well as the installation of a scientific monitoring.

The scientific literature in veterinary medicine on this subject requires better organization and promotion of the Algerian scientific production. This leads to consider the establishment of a digital library. Its purpose could be the reflection of the combination of traditional services offered by professionals and new digital services provided by technologies of communication and information. We have for example, free and open access on the internet, the possibility of a research and consultation online and request a selective dissemination of information to the profile of interest.

In order to achieve these objectives, the direction of the library of the Higher National Veterinary School (ENSV) of Algiers propose to address this problem of visibility of scientific production in line with the socio-economic needs of the country.

To analyze the needs of users of ENSV, a survey was conducted among this category, in terms of supply of digital resources online. The methodological approach was directed by a quantitative and qualitative survey. This phase will allow us to understand the expectations of users and to assess their real needs.

It is in this same spirit that the computerization of the library of ENSV was for us a starting point to consider the establishment of digital library veterinarian as OPAC and access to catalog online readers.

Keywords: Needs analysis, Users, Digital library, Veterinary medicine, Algiers

### A New Trend in Sabancı University Information Center- QR Code Application

Cem Ozel, Mine Akkurt

Sabancı University, Turkey

**Abstract:** Rapid development of the mobile technologies allowed recent years popular application QR code to be used for various purposes and in different areas. New generation's rapid adaptation to the change allowed this application's widespread usage. QR code with structural properties can be supported with new ideas and considered a practical solution. QR code application has turned into a new trend in libraries/information centers as well as in the other areas. The QR code applications in

libraries/information centers had various usage areas. One of the usage areas of the QR code is the marketing field. Along with the realization of the QR code project, creating awareness and especially effective promotion and usage of e-resources is intended. In this study, various QR code applications used for study room booking, filling out request forms, promoting e-resources and especially e-books which are successfully practicing in Sabanci University Information Center will be emphasized. In addition to these promotional activities, the study will also focus on preparation process, serving of these applications to the users and the effects of these studies on the result.

Keywords: QR Code application, E-book, Marketing, Promotion

### Outcome and Role of Public Libraries: The Case of Norway

Professor Svanhild Aabø & Professor Ragnar Audunson, Oslo and Akershus College of Applied Sciences, Norway

Abstract: How are public libraries in Norway used by the inhabitants in the local communities, and by whom? To investigate these questions, representative samples of the population in three townships of Oslo were surveyed both in 2006 and in 2011. The three townships have markedly different demographic profiles. Multivariate regression analyses were performed to analyze the differences in the responses. The findings in the two surveys are strikingly consistent and similar. The library as a learning arena is ranked as its most important role. More surprisingly is the finding that the library as a place where one can be alone but not feel lonely is ranked as number two. Its third most important role is as a cross-wise meeting place in the local community. Assembly buildings such as sports arenas, indoor swimming pools, community and cultural centers are ranked as the most important meeting places in the local communities. The local schools are ranked as number two and the local library branch is ranked as number three. The local shopping center and religious meeting places are significantly less important local community meeting places. The respondents' trust to different democratic institutions are measured using an 11-point rating scale. The local library scores highest, then comes the police and the Parliament scores as number three of nine institutions. The study contributes to understanding the role of the public library in a digital and multicultural context provision.

Keywords: Public libraries, Outcomes, Trust, Norway, Survey

### Outsourcing of Library Operations, a Step towards Development and Entrepreneurship: A Case Study of National Library and Archives of Iran

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<sup>3</sup>Vice President of Processing and Organizing Department in National Library and Archives Organization of Islamic Republic of Iran and PhD student of Library & Information Sciences (LIS), Iran

**Abstract:** Entrepreneurship in the modern societies especially in the young society, who are looking for job, has a very important position. The term "Entreprendre" consists of the process of the establishment of value by the means of forming the special collection of the resources to use of opportunities and it is a French word that means: to undertake. Librarians and information experts with creation of new ideas and use of opportunities, present new services and enhance the values of their previous services. It is necessary for institutions and organizations of public services like: governmental organization, universities, librarians and museums, that be entrepreneur and creative power. William Bygrave believes that the entrepreneurship process consist of all activities, duties, acts to gain and pursuance the opportunities. To create the new opportunities and values in the libraries, outsourcing can be a practical option. By a good outsourcing many of entrepreneurship criteria as: creation a new values for organization, ideas, new opportunities, acceptance of risk, improvement and quality control can be achieved. (Shafiei Ardestani 2011, 65).

The NLAI as a main library has a very significant duties and responsibilities. For example the organizing and cataloging of the library materials (book & non-books materials) is one of the important duties. With increasing the publication of library materials and Their Variety, it is predicted the part of the materials couldn't be organized. So outsourcing of the cataloging services can be a good solution in this regard, because of the exist experts in the NLAI.

This research explores about the advantages and profits of the outsourcing in the N.L.A.I. as a good way to fulfill the main responsibilities and to reach part of the aims. And also this research will answer to this question that: Does the outsourcing in the N.L.A.I. can help to create an entrepreneurship and business for librarians?

In this research the library and comparative study method will be used to propose the recommendations. In this regard, the elements of entrepreneurship process (entrepreneur, opportunity, structure, materials, and rapprochement) have been evaluated.

**Keywords:** Entrepreneurship, Outsourcing, Cataloging, Library operations, National Library and Archives of I.R of Iran (NLAI)

# PageRank and Citation for Patent Evaluation Seonho Kim, Woondong Yeo, Jaemin Lee, and Byoung-Youl Coh

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**Abstract:** PageRank algorithm (PR) is a document evaluation algorithm which has been used in world famous web search engine, google. The basic idea of PageRank, random walk model, assumes that the document model on which it is running is well connected networked document model. The citation network of academic papers or patents,

however, are different from web documents because citations are necessarily directed by time and sparser than web connections.

In this paper, we analysed the PageRank algorithm when it is used for citation network of patent. Also, we tested the performance of PageRank, regarding to evaluating the value of patents, by comparing it with the result of simple citation frequency based ranking algorithm by conducting a user study with field experts.

**Keywords:** US Patent, Document evaluation, PageRank algorithm, Citation Network, Frequency-based ranking, User study

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### Paradigms Shift of Information Literacy Study in Taiwan Szu-chia Scarlett Lo

Graduate Institute of Library and Information Science, National Chung-HS, Taiwan

**Abstract:** Bringing high quality information services to users is the core value of library professions. Information literacy plays an important role in accessing information and providing information services efficiently. Like other important issues, the core value of information literacy draws attention of professionals from both practitioner and academic sites to invest efforts into theoretical and practical researches to better understand users' information literacy competencies, how the competencies were acquired and find more effective alternatives to provide information literacy education. Besides sharing the know-how via informal communications channels and invisible community, the practitioners and researchers also tried to disseminate research results by publishing works in-print or online. The publications become valuable sources for the new comers to learn what happened in the past and for the strategic planners to foresee what should be done in the future. In this study the author will review articles issued in the top four Library and Information Research Journals published in Taiwan, Journal of Library and Information Science Research, Journal of Library and Information Studies, Journal of Library & Information Science and Journal of Educational Media & Library Sciences, during the period from 1990 to 2013 to reveal the change of research paradigms over the last 24 years. The author takes bibliometrics approach to reveal the growth of publications, distributions of productivity, teaching approaches, standards applied, course designs, assessment mechanisms and issues in information literacy. Further investigation is achieved to enclose the theories and methodologies used in information literacy researches. Based on the understandings of those issues, the author is able to draw a research map of information literacy in Taiwan for the last two decades and to learn how the research paradigms shift over those years.

Keywords: Information Literacy Research, Research Paradigms Shift

# A Pathway to Research Librarianship: Uncovering the Knowledge Skills, and Professional Practice of the Research Librarian

### Mary Nassimbeni & Karin de Jager

Library & Information Studies Centre, Chancellor Oppenheimer Library, University of Cape Town, South Africa

**Abstract:** Pressures on institutions of higher education to increase their research output and profiles have been heightened in recent years by publication of research rankings (e.g. the Times Higher Education Supplement World University Rankings). These effects have cascaded down to academic libraries which have to reconfigure existing and define new services that make measurable contributions to institutional research output. Library education in South Africa has hitherto focused on generalist rather than on specialist librarians, so that many librarians have regarded themselves as inadequately prepared to provide high-level support to researchers. Externally funded short-term interventions to introduce librarians to the research landscape and to pursue avenues in which to support researchers, have served to confirm the need for a sustained intervention at Master's degree level. The Library and Information Studies Centre at the University of Cape Town accepted this challenge and in 2013 first taught a module "Research Librarianship" as a 25% component of a Master's degree by coursework and dissertation, and this course will be repeated in the first semester of 2014.

This proposal is for a presentation in which we intend to explore the rationale of the course construction, the conceptual framework on which it is based and how it is being delivered. We highlight the methods we used to uncover the domains of knowledge, the research methods and the professional practice underpinning research librarianship, and that distinguishes it from academic librarianship. From both the participants of our previous short interventions and from the participants in the 2013 course, it has become obvious that in addition to addressing the difficult issues of effective research support, our interventions need to take cognizance of complexities of change management and institutional culture, as institutional and individual goals are not always congruent. As the 2013 participants were working librarians who are doing the course part-time, we will be able to explore some of the impact that our course is already manifesting, and will consider the course evaluations from both the 2013 and 2014 iterations, pointing to directions in which our intervention may develop and expand.

**Keywords:** Library education, New services for the research community, Research librarians

### Patients' Records Management by Medical Personnel in Military Hospitals in Nigeria: A Study of Lagos Metropolis Military Hospitals

### Umma Dauda Daura<sup>1</sup> and Abubakar Ladan<sup>2</sup>

<sup>1</sup>Department of Library and Information Science, Umaru Musa Yar' adua University Katsina, Nigeria

**Abstract:** The study seeks to generate information on the patients' records management by medical personnel in military hospitals in Nigeria. The objective of the study was to identify the types of patients' records created and maintained, the procedure adopted for the management of the records, retention and disposal of unwanted records and challenges associated with the patients' records management in the military hospitals studied. Qualitative research methodology was used for the study; data was collected through interview. The findings of the study revealed the types of patients' records created and procedure adopted for the management of the records. The findings also revealed the challenges associated with the management of patients' records. Recommendations were provided in order to overcome such challenges.

Keywords: Patient, Records, Management, Hospital, Nigeria

# Pedagogical Experience for Education of Librarian Curators of Special Collections and Rare Books

Eduardo da Silva Alentejo, Fabiano Cataldo de Azevedo

Universidade Federal do Estado do Rio de Janeiro (UNIRIO), Brazil

Abstract: This research treats about education of 'new curators' within the Librarianship Undergraduate Course of UNIRIO. This communication aims to identify contributions to promote education for new curator and find out the way to encourage undergraduates in this area. It questions: what key-contribution could be found from shared studies between Bibliography and History of Printing and Libraries enabling the promotion of librarian education as curator? How to bring undergraduates to contact with materials in special collections to enhance their educational experience? Through qualitative research, it considers that literature review should be faced with the professional practices. As main result, Curator of Special Collections allows manage human and technological sources in the library environment. The pedagogical project takes a large time to reach its goals. It must be considered in six steps. This provides trustful and self-esteem for students and professionals curator.

**Keywords:** Curators of rare books and special collections, Librarianship Pedagogical Project, Training for Librarian Curator, Bibliography Studies, History of Printing and Libraries

<sup>&</sup>lt;sup>2</sup>University Library, Umaru Musa Yar' adua University, Katsina, Nigeria

### Perceived Impacts of the Public Library on the Dutch: Findings from a National Survey

Marjolein Oomes, Netherlands Institute for Public Libraries, The Hague, Netherlands & Frank Huysmans, Science, Media Studies, University of Amsterdam, Netherlands

**Abstract:** As part of a research program to develop outcome measurements for public libraries, a survey questionnaire was devised to assess the perceived impacts of the public library of Dutch library users aged 13-87. Ca 1000 library users and 500 non-users were interviewed about their personal benefits and about their perception of the impacts the public library has to the community and society at large. Impacts were grouped in 5 domains: educational, social, economic, cultural, and affective. In addition, a slightly modified version of the Vakkari & Serola (2012) items about perceived impacts in every day life domains was administered. In this contribution, the main findings of the survey are presented and placed in the context of a comparison with results from Finland and Norway (Vakkari et al., forthcoming).

Keywords: Public libraries, Outcome measurement, Impact assessment, Perceived benefits

## Perceived Outcomes of Public Library Services and Lifestyles among South Koreans

Dr. Nahyun Kwon, Myongji University, Seoul, South Korea

**Abstract:** The current study undertakes the perceived outcomes of public library services in Korea using Vakkari and Serola's (2012) scale concerning perceived benefits. Furthermore, this study also examines how a citizens' use of a public library and her/his perceived outcomes of service uses are associated with her/his socio-economic status and life styles in the multi-media environment of the 21st century. The data of this study are collected by administering a self-reported questionnaire to a national representative sample of 1,000 adults who are 18 years old or above. The questionnaire is composed of closed-ended question items, including the Korean-translated version of Vakkari and Serola's scale, 22-item European Social Survey's value scale measuring life styles (Davidov, Schmidt, & Schwartz, 2008), variables measuring media use and media perceptions, and basic socio-demographic variables.

The presentation reports the results of the study that investigates the following four specific research objectives:

- 1. Investigate the extent the general adults in South Korea perceive the benefits from their using the public library services in the 22 areas of their life.
- 2. Identify the characteristics of the South Koreans' public library use and service perceptions by comparing the study results with Vakkari and Serola's Finnish study (2012)

- 3. Investigate the extent the South Korean citizen's perceived outcomes of public library services are associated with their socio-demographic factors and life styles in the multiple media environment
- 4. Examine the replicability of the Vakkari and Serola's scale and scale's usefulness in South Korean cultural setting

The study results are to inform the status quo of public library services in Korea and the areas where universal public library services are lacking.

Keywords: Perceived outcomes, Public library services performance measurement, Lifestyles, South Korea

# Perception towards Cataloging Subject in Education: A Preliminary Study

### Intan Nurbaizura Binti Zainuddin, Jannatul Iza Binti Ahmad Kamal, Mazwani Ayu Binti Mazlan

University of Technology MARA, Malaysia

Abstract: The research study is about individual'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 (IIUM), 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 faculty in library science (or related) 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. Students stepped in with negative perception towards 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

# Personas and Scenarios Meet Ethnography Katriina Byström and Heidi Kristin Olsen

Oslo and Akershus University College of Applied Sciences, Norway

**Abstract:** This presentation addresses the analysis of qualitative research data in form of personas and scenarios. The focus is on both the possibilities and the challenges related to a methodology of creating and utilising personas and scenarios as a part of the research process as well as in the distribution of research results to the practice field in question.

The methodology is based on the use of fictive characters (personas) and situated narratives (scenarios) (e.g. Nielsen, 2013). Nielsen (2004) describes the use of personas and scenarios as a method to "help designers to imagine the users and aid development of design ideas". In this context, a persona can be described as a constructed user of a system; not an average user, but a fictive person with typical tendencies when using a system or a service. Similarly, scenarios describe situations where the users and systems interact

We recognize the potential of personas and scenarios in LIS research and are interested in probing further how the methodology may be reinforced for analysis of ethnographical research data. We see the potential of finding ways to aggregate the rich narratives derived from case studies. The ideas from genre theories, practice orientation and sociotechnical perspectives provide a platform for development of personas and scenarios for a purpose of making the research results more useful in practical development of not only systems, but work itself. However, there is equally a need to discuss what will be, or is at risk to be missed in transformation of field data into the personas and scenarios, as well as to how to work with created personas and scenarios over time.

We will explore how personas and sceniarios can be used in study of information behavior on a basis of two specific case studies where personas and scenarios were utilized. In Olsen (2013), the personas were created by collecting several experienced librarians' observations through many years. Byström and Strindberg (2010) analyzed descriptions of instances of work by task diaries held over time by a group of engineers, out of which they created a number of work-task scenarios.

Keywords: Personas, Scenarios, Work-tasks, Information behaviour, User studies

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# Philosophical Basis of Media and Information Literacy Leena Pylkko

Turku City Library, Finland

**Abstract:** Nelson Goodman as a philosophical basis of Media and Information Literacy Media and information literacy discussion needs a philosophical basis, which today is lacking. I propose that the thinking of Nelson Goodman be a fruitful basis. What is interesting in Goodman from the point of view of the libraries is his radical view on language. Language is for Goodman a way of making worlds. All arts: dance, music, pictures, and writing produce symbol systems and languages of their own. Understanding means taking part in the world of the artwork or text. Goodman's view on language is connected to his view on the world called irrealism, stressing how all human activity is creative.

The presentation also includes examples of everyday library work where the thought of world-creating helps understand the reading and media habits of different groups, especially those in need of special care, as people with different disabilities. When we look at the use of different media as a way of taking part in different worlds, and a making of worlds, this helps us in library work to develop a new view on customers even with disabilities as active world-makers.

Keywords: Philosophy, Nelson Goodman, Disabilities, World-making

# PIOP's Museums Network and Library: ISO 9001:2008 Elia Vlachou<sup>1</sup> and Chrysa Nikolaou<sup>2</sup>

1Head of the Foundation, Piraeus Bank Group Cultural Foundation, Greece 2Head Librarian, Piraeus Bank Group Cultural Foundation, Greece

**Abstract:** The Piraeus Bank Group Cultural Foundation (PIOP) is a non-profit institution that promotes the Corporate Social Responsibility of Piraeus Bank in Greece, through multifarious activities (museums, library, archive, publications, research programs, temporary exhibitions, educational programmes, etc.) and a continuous involvement in the field of culture. One of the main goals of PIOP is to contribute effectively to the country's cultural life. In order to achieve this goal PIOP implements a Quality Management System, this includes all those processes of the Foundation that ensure high quality services, transparency and standardization of procedures for research, design, creation and operation of its museums.

The PIOP's Quality Management System standardizes procedures (summarized) relating to: a) research programs for the creation of thematic museums, b) supply of high quality research material, c) maintenance of the correct and safe operation of museums, d) measuring satisfaction ratings, e) continuous education and training of staff, f) setting objectives for quality, g) continuous improvement of the quality of services provided by the Foundation.

The Quality Management System of PIOP complies to the requirements of ISO 9001:2008 and the Foundation is committed to continuous improvement of its Quality Management System.

The first quarter of 2014, PIOP is planning to obtain certification for the remaining departments (Library Department, Archive Department, and Publications Department). At this moment the Library Department is recording the current situation and designing the services and processes with the effective participation of library staff, and adding changes in order to comply to ISO 15489:2001 (International Standard on Records Management) and ISO 11799:2003 (Information and documentation – Records management). We will present the necessary actions and the system needed for the certification of the Library and its effects.

**Keywords:** Museums network (PIOP), Library (PIOP), Quality Management System, ISO 9001:2008, ISO 15489:2001, ISO 11799:2003

### Polish Scholarly Bibliography – A Foundation for Polish Research Evaluation

### Aleksander Nowiński and Wojtek Sylwestrzak

ICM, University of Warsaw, Poland

**Abstract:** There is a growing need to employ modern IT based solutions to monitor and analyse scientific output of the research institutions in Poland. Many of them are state funded universities and institutions and their research excellence has to be properly evaluated in order to justify the related public expenses. Bibliometric results are commonly agreed to provide an adequate measurement of the quality of research, regardless of their intrinsic flaws. Until recently, the evaluation of the research institutions has been based on a dedicated bibliographic survey. This survey was carried out every three years, and its results were discarded after each evaluation, so there was no continuous process of data aggregation. At the same time, still not all Polish universities have proper bibliographic systems, or their existing systems are in many cases far from completeness.

The Ministry of Science and Higher Education decided to build an integrated environment to collect and manage detailed data about all scientific institutions in Poland. A significant part of the environment is PBN - the Polish Scholarly Bibliography system, developed by CeON, the Centre for Open Science at ICM, the supercomputing centre of the University of Warsaw.

The primary purpose to develop the PBN was to be able to aggregate distributed up-todate bibliographic information about all the publications of Polish researchers and research institutions. This registry will become a single point to report to, and it will be used in future as a source of the data whenever publication list will be required for any reason (in grant funding agencies, research unit evaluation etc.).

The intended scope of the bibliography includes all publications affiliated to Polish scientific institutions or authored by Polish researchers. As researchers and institutions are registered with the environment, PBN disposes of an almost perfect authority file for authors and their affiliations. Each author is uniquely identified using state id number, PESEL, which allows precise author disambiguation, regardless of the name similarities.

PBN is built around the concept of aggregation data from institutional bibliographic systems, yet as it was stated, the present content of the institution publication databases and CRIS systems is not good enough to provide all required information. Therefore, the system allows direct input for wide range of users, including the authors themselves. This process is supported by a collection of over 30 million entries harvested from the Internet, which can be used by authors in order to reduce their typing efforts. When a publication is either aggregated from a harvested source or typed in directly, a special approval system is engaged to ensure that no vandalism incidents occur. It also allows university libraries to perform their quality control.

The two still outstanding issues are a high duplicates ratio, which requires sophisticated duplicate detection and merging algorithm and still limited number of participating libraries and institutions.

The system is currently in the final phase of its beta test stage and the number of available publications is continuously increasing, while a noticeable interest in the community has been observed. It is expected that within two years the PBN system will provide a base for all the research evaluation efforts in Poland.

Keywords: Research evaluation, CRIS, Bibliographic databases, PBN, POL-on

# Portuguese Scientific Output on Web of Science and on Scopus: A Comparative Analysis

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Abstract: In 2004 the Portuguese library consortium, Online Knowledge Library (b-on), was launched and with it, it became easier to get access to full text international scientific publications. This study aims to analyse some bibliometric indicators of the Portuguese scientific output seeking to evaluate the correlation with b-on. It was analysed the usage of b-on resources by the public universities members of the consortium from 2004 to 2010, with a sample of the five universities with more downloads per FTE (full time equivalent). In addition to the usage data, we analysed the Portuguese scientific output through the comparison of two databases: Web of Science (WoS) from Thomson Reuters and Scopus from Elsevier from which we identified the articles indexed with Portuguese affiliation and by the five Portuguese universities between 2000-2010. In WoS we found 79.192 articles indexed with at least one Portuguese author, published in the years under analysis, 40.413 with affiliation at least in one of the five universities considered in this study (51%). In Scopus the number of articles is similar, 62.634 articles for Portugal from which 33.417 have affiliation in at least one of the five universities (54%). We identified the research areas with the largest number of articles. The national scientific production concerning the scientific areas is relatively diverse in accordance with both databases. The same article can have multiple authors, with different institutional affiliations from different nationalities and we noticed that the Portuguese international co-authorship is growing in the recent years. The study confirms 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, Web of Science, Scopus, Portugal

### **Preservation of Records for the Next Generations**

Dr. C. Manickavasagam<sup>1</sup>, Briget Anitha<sup>2</sup>

<sup>1</sup>Prof. & Head, Department of Library and Information Science, S.T. Hindu College, India

**Abstract:** Preservation of digital material is made easy with the technological advanced in information science. Nowadays almost all records being created are electronic. We are in the process of converting the existing resources into electronic one. It is very easy to generate electronic resources within a short span of time with little effort. Digital preservation methods should be made with due consideration of current and future users of digital resources. This article discusses the present state of approaches to digital preservation, migration, conversion, storage media and factors affecting storage media.

Keywords: Digital preservation, Factors affecting storage media, Long term preservation

## Print, Electronic, or Both? A Study on the Preferences and Habits Exhibited by Student Populations in New York City

Peter Nicholas Otis and Ashley Kelleher, Pratt Institute

Abstract: This paper reports a selection of findings from research exploring the habits and preferences of students accessing textual content in different formats (e.g., print or electronic text, etc.) as well as on multiple technological platforms (e.g., laptop computers, tablets, textbook, etc.) when performing scholarly activities. Data was collected through a series of methods, 1) a longitudinal diary study, conducted over the course of an approximate two month period from September through November 2013; and 2) observations of student populace in four institutional settings; and 3) interviews conducted with students from these local populations. Analysis of a selection of results indicated that students primarily access eBooks due to their availability as either been provided or promoted by their instructors, a conclusion that is also discussed field literature (RJ Coley et.al., 1997). Yet unexpectedly, results suggest that students most strongly value the ability to directly engage and interact with multiple resources including print and profoundly electronic—in ways that are ultimately both spatial and tangible. When asked to describe their feelings toward the use of electronic reading devices in the survey, respondents most frequently and strongly described annotating activities (the ability to mark up a document according to the user's needs, including highlighting, book-marking and note-writing) and a preference for larger or more expansive interfaces in computer screens (in order to provide for simultaneous visibility/accessibility of multiple documents). These trends are enforced by data

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collected during the observation. Further research engaging the fields of user experience focused on multi-interface engagement as well as cognition show potential to add further value to these findings (Liu, 2005, and Holsonova, et.al 2009).

# Proposals of Civil Society Focused on Environment and climate Change to Promote Open Government in Mexico (PAPIIT IN403113-RN40313)

María de los Ángeles Medina Huerta, M.L.I.S. student in Library and Information Studies in the National Autonomous University of Mexico

**Abstract:** In 2011 Mexico acceded to the Alliance for the Open Government Partnership (OGP) in order to strengthen actions relating to transparency, access to information and the fight against corruption; in this context, has been sought to strengthen the participation of civil society in the proposals that will improve institutional practices to ensure compliance with the objectives, generating an expanded Action Plan which involved 8 OSC designated as experts on transparency and accountability, on May 31, 2012 of which only one, stands out for its focus on environment and climate change issues. This study analyzes the actions in terms of information resources and technologies of information and communication (ICT) of 3 of Civil Society Organizations, focused on environmental issues and climate change, in order to identify which can encourage the participation of citizens in the definition of public policies on these issues.

Keywords: Open government partnership, Civil Society Organizations, Mexico References

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### Purposeful and Repeated Use of Standardized Assessment of Information Literacy: A Case Study at a U.S. Private Liberal-Arts University

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<sup>2</sup>Associate Dean, Leatherby Libraries, Chapman University, Orange, California, USA

**Abstract:** Chapman University is a private medium-sized liberal arts university located in Orange, California. With aspirations of national prominence, Chapman University is poised to enter the national stage in the United States and the university library will play an important role in this endeavor. One way that the library has demonstrated this commitment has been to create a scaffolded information literacy program that encourages lifelong-learning and provides instruction to our undergraduate, graduate, and doctoral students.

A crucial element of any highly effective information literacy program is a diversified approach to assessment. The Leatherby Libraries sought out new ways to assess our students' information literacy skills to add to the informal assessment practices that we already had in place. The instrument selected for the initial phase was the Standardized Assessment of Information Literacy Skills (SAILS). SAILS is a valid and reliable test based on the information competency standards for higher education produced by the Association of College and Research Libraries.

The version of the SAILS test we used was the cohort test, which we first administered in 2007 on paper in a highly monitored setting with 130 students. In 2008 we tested 165 students and in 2009 we tested 655 students. Starting in 2010, we switched the method of administration to online and tested 965 students, followed by 1,017 students in 2011 and 991 students in 2012. Results from the testing consistently show that students at our university perform above the average compared to students at other master's institutions. Results also provided internal benchmarks and details about skill sets and majors. For example, we found that across the years students majoring in sociology and psychology scored lower than students in other majors with regard to documenting sources, but better than other majors in understanding legal, economic, and social issues.

In 2013, we investigated a new version of the SAILS test that provides an overall information literacy test score for each student, with designated competency and mastery levels. We elected to use that version of the test as part of a larger university effort to track student learning over the course of a student's college career. We administered the test to 919 freshman students in the Fall of 2013. Results of that testing show that, as expected, few (16%) of the first year students demonstrated competency or mastery. Additional analysis of the data set is ongoing. We will examine the relationships between the variables of student major, transfer status, and student self-assessment of skill level with information literacy score. This testing and analysis will be mirrored by administering the same test to students who are completing their last year of college.

One of the challenges of using a standardized tool is interpreting the results within the local environment; another is translating results into improvements in instructional effectiveness to address student learning outcomes. Our SAILS results allow us to better understand our students' information literacy skills and to adjust our instructional goals accordingly.

**Keywords:** Information literacy, Information literacy assessment, Standardized assessment

### Quantitative and Qualitative Methods for Measuring the Public Library's Role as a Community Meeting Place

Professor Ragnar Audunson & Professor Svanhild Aabø, Oslo and Akershus College of Applied Sciences, Norway

**Abstract:** The social role of the public library is complex. It is related to education at all levels from kindergarten to university; it is related to cultural politics and to leisure time; it is related to social policy – to empowerment and integration of ethnic and cultural minorities etc. One dimension of the social role of libraries which has achieved increased focus over the last years, it its role as a community meeting place. That is reflected in research and it is reflected in library policies. In 2013 the Norwegian law on public libraries was revised and one of the amendments made was a paragraph stating that one of the missions of the public library is to be an independent community meeting place and arena for public debate and conversation.

Measuring how the library performs and fulfills its complex mission in general and its role as a meeting place in particular is far from trivial. Norwegian research between 2006 and 2013 has tried out different methods and instruments for eliciting the library's role as a meeting place. Within the framework of this research, one has been particularly preoccupied with the library's role and potential as a so called low intensive meeting place, i.e. its role as a meeting place where one is exposed to other values, interests and cultures than one's own. Both quantitative and qualitative instruments have been developed and tested out. In the course of the research three quantitative surveys, one quantitative observation, qualitative observation, focus group methods and individual in depth interviews have been conducted. In our paper we will present our experiences from using these instruments and methods. Which approaches seem to be most promising when it comes to eliciting the somewhat elusive and not so easily measured concept of the library's role as a meeting place.

Keywords: Public libraries, Meeting place, Methods, Norway

### Quantitative Approach to Use of Bibliometrics in LIS Research

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Abstract: Library and Information Science (LIS) literature mirrors the development of the LIS profession, which needs to be analyzed for growth of the profession and to overcome its weaknesses. Bibliometric methods have been widely used in LIS research for analysis of literature. This study aims to review use of bibliometrics in LIS research. It concludes that bibliometrics has been found to be very useful in solving diverse issues. Through this paper we recommend the use of citation normalization for bibliometric research in libraries across India. In this report normalization of citations is performed in reference to two different normalization groups: WoS sub-fields and journals. When normalizing, we also take publication year and publication type into account. A normalization group might then look as follows: papers of the type "review" within the sub-field "Metallurgy & Metallurgical Engineering" published in 2002. The most commonly used normalization type was developed by Schubert, Glänzel and Braun during the 1980s. Simultaneously the Leiden group developed a variant methodology with the well known "crown indicator". These normalized indicators are typically named CPP/JCS or CPP/FCS depending on whether the normalization is carried out in relation to journals or sub-fields. The Leiden indicator is defined as follows:

$$\frac{\sum_{i=1}^{P}ci}{\sum_{i=1}^{P}[\mu_f]_{\ i}}$$

where c is the number of cites to paper i and [µf]i is the average number of citations received by papers in the normalization group of paper i. In our calculations of "Field normalized citation score (NCSf)" and "Journal normalized citation score (NCSi)" we have chosen to adjust this as follows. First, the field normalized citation score (NCSf):

$$\frac{1}{P} {\sum}_1^P \frac{c_i}{[\mu_f]^j}$$

 $\frac{1}{P} {\sum}_1^P \frac{c_i}{[\mu_f]i}$  The difference is that our calculation treats all papers equal, while the Leiden version gives higher weight to papers in normalization groups with higher reference values, cf. Lundberg. When calculating the "Normalized journal citation score (NCSj)" (similar to the Leiden-measure JCS/FCS) we use the following formula:

$$\sum\nolimits_{i=1}^{P} \frac{\ln(c+.05) - \left[\mu_{f[\ln\,]}\right]{}_{i}}{\left[\sigma_{f[\ln]}\right]{}_{i}}$$

The normalized values are then judged on the basis of five different levels of performance:

. NCSf - 0.6 significantly far below international average (insufficient)

**B.** 0.60 < NCSf - 1.20 at international average (good)

C. 1.20 < NCSf - 1.60 significantly above international average (very good)

**D.** 1.60 < NCSf - 2.20 from an international perspective very strong (excellent)

**E.** NCSf > 2.20 global leading excellence (outstanding)

However, its application to LIS literature is not very common in India and this area of research needs attention. It recommends provision of better application of bibliographic research to literature, comprehensive bibliographical control and sharing of best practices to enhance the use of bibliometrics in LIS research.

Keywords: Bibliometrics, LIS research, Library and Information Science, India

# Qualitative Approaches for Analysing Social Media Maureen Henninger<sup>1</sup> and Paul Scifleet<sup>2</sup>

<sup>1</sup>Information & Knowledge Management Program, Faculty of Humanities and Social Sciences, University of Technology, Sydney, Australia

**Abstract:** The phenomenon of social media communication has spread through most contemporary societies and cultures; it drives and documents international and national events, contributes to investigative journalism, leads participatory democracy movements and records personal and collective memories. Research in this space has identified the challenges faced in using big data for social science research where it is recognised that there are both immediate and lasting values in collecting and working with social network communications. Although we know that the Library of Congress has taken a substantial download from Twitter, the full extent of those institutions collecting and recording digital life in social media is unclear (Allen, 2013). Methods still need to be designed that support current use, data curation, preservation and future access (Bruns, 2013). For researchers the need to understand the structures and dynamics of the communications and their impact on the transmission of ideas is critical.

This study presents the findings from a qualitative study of the communications collected from real time social media feeds of Twitter, Facebook and Google Plus for the University of Technology Sydney and Charles Sturt University's *datajournalism and digital scholarship* research project. The research investigates the key elements in the information architecture of social media communications for a variety of events and topics in 2013, including recent social media debates about the status of refugees status in the Australian political landscape and shows how the structural elements of communication can support discovery, analysis and the reporting of findings from social media across the breadth of social studies research.

The research examines qualitative approaches to working with aggregated sets of social media data including strategies for keyword searching, data cleansing, preparation and reporting. The methodology presented is not computational, rather it combines a qualitative content analysis of the communications with an analysis of their materiality and form (Williamson, 2013). The paper provides an integrated approach for understanding the social dimensions of the information architecture and demonstrates how the comparative analysis of communications across different social networking sites can be brought together to support rich, and detailed social studies.

Keywords: Social Media, Qualitative Content Analysis, Qualitative Methodology

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<sup>&</sup>lt;sup>2</sup>Charles Sturt University, School of Information Studies, Wagga Wagga, Australia

# Qualitative Methods in Workplace Learning Hannele Fabritius

M. Soc. Sc., Library Director, Helsinki University Library, Finland

**Abstract:** Methods of learning in the workplace will be introduced. The methods have a connection to competence development and the process of development discussions. The tools developed and applied are a fourfold table, a plan of personal development targets, learning meeting and a learning map. The methods introduced will better all kind of learning in the context of work tasks. Through methods introduced employees' active engagement and motivation to learn becomes a key element for bettering library services and making sure that the library will achieve the goals set in its strategic plans. An example of a fourfold table and a learning map will be introduced in the conference presentation.

**Keywords:** Workplace learning, Competence development, Leadership tools, Knowledge management, Strategic management

# Quality Analysis of the International Cultural Exchange in Public Libraries (Communication Strategies)

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Biblioteka grada Beograda, Belgrade City Library, Serbia

**Abstract:** Public libraries take significant place on the map of cultural events and cultural exchanges, not only between libraries, but also between cultural institutions and arts delegates around the world. Belgrade City Library as the largest public library in the Balkans has responsibility to be active in exchange of cultural activities, projects and programs. Library within its activities takes its part in cultural exchange as a host for cultural representatives from all over the Globe, as well as a guest in foreign cultural centers and Serbian embassies abroad.

**Keywords:** Cultural exchanges, Public libraries, Organization of cultural programs, Cultural bonds, International activities

Quality and Value of Library Services from a User's Perspective: The Case of National and University Library in Ljubljana, Slovenia

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**Abstract:** National and University Library of Slovenia has a long history. Its beginnings date back to the year 1774, when an ancestor of today's library, library at the Ljubljana Lyceum, was established. In the next 240 years of its existence, the library roles and functions and even its name has changed several times. Since 1919, when the first Slovenian university (University of Ljubljana) was founded, it performs the functions of university library, and after the Second World War it was granted the status of national library. After the Yugoslav breakup Slovenia become independent country and the library became central state library. It also performs the tasks of the national library system development centre and develops Digital Library of Slovenia.

Due to different roles and functions, performed by the library, the groups of customers are diverse. Beside library users, customers are also publishers, libraries, organizations in the fields of culture and science and State bodies, competent for the libraries. When planning activities and providing services, library must therefore monitor the needs, expectations and satisfaction of diverse customer groups, and use a variety of assessment methods and tools in the process of library performance evaluation. In these times, marked by economic crisis and the reduction of budgets for the operation of public services, the library must continually prove the quality of its services and rationality in spending to the founder and the environment, and present the details of the outcomes of its performance.

In this article we will focus on the results of assessment of the quality and value of library in terms of its active or potential users, as well as on changes that can be traced to their needs, expectations and perceptions of quality in the last three decades. Since 1987, when the first major survey research, surveying 450 users, was carried out, the library periodically carries out various studies of users. In a survey, carried out in 1995, the general public, and its observations, obtained through a field survey, was included for the first time. Since 2008, the library performs user studies using the online web survey methodology, which not only allows rapid acquisition of data and their processing and presentation, but also represents an effective tool for obtaining respondents, who are not (yet) users of the library.

The latest survey, concerning the user views on information resources and services of the National and University Library was carried out in autumn 2013, and involved 901 respondents. In comparison with the results of previous studies, we can see again that respondents mostly visit the library for the use of its premises for the study. They poorly take advantage of electronic information resources and tools for their detection, only a few borrow e-books, more than half of respondents have not used free wireless network yet. Only a small proportion of respondents are dissatisfied with the resources and services of the library, and on average, the respondents reflect a high level satisfaction with library staff. The proportion of those, who value the library as publicly well-recognized, an open, friendly and trusted institution, has increased in comparison with the results of previous research, as well as the share of those, who highly value the impact of library on the quality and efficiency of their work and study. The contribution of library activities to the development of Slovenian science and culture is identified by 83% of respondents, while its contribution to the socio-economic development of the country identified 60% of respondents.

We were also interested in determining what value represents library and its services in financial terms to the respondents. Therefore, the questionnaire included a few questions,

which were previously included in a study on the value and benefits of the German National Library of Science and Technology (Hannover, Germany), carried out in autumn 2009. As an average minimum annual retribution, in return to agree to the closure of libraries, respondents indicated the amount of 1,392€. The unavailability of library services would greatly impact the study and work of 63% of respondents, while only 5% indicated they would not be affected. The research indicated, that if materials and services, offered by the library, would have to be obtained elsewhere, it would lead to 708€ of additional costs on average yearly. In case of cessation of budgetary funding of library, 35% of respondents would be prepared to financially support it, with average annual contribution of 24€. Results, of course, cannot be generalized, because the sample of respondents was not representative, and the standard deviations from those values were high. Nevertheless, the research results are relevant to the library. On one hand, they indicate that the survey participants recognize library's economic value. On the other hand, respondents' comments indicate that such kind of evaluation of public sector services is still something unusual in Slovenian society.

**Keywords:** National and University Library in Ljubljana, Slovenia, Library evaluation, User studies, Quality assessment, Library value

# Quality Assurance Method for Cropping Error Detection in Digital Repositories

### Roman Graf<sup>1</sup> and Ross King<sup>1</sup> and Stefan Majewski<sup>2</sup>

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**Abstract:** One of the common challenges in the mass-digitisation of book collections is correctly cropping (removing unnecessary border material from the digital image) during the automated image post-processing. This paper presents a method that supports the analysis of digital collections (e.g. JPG files) for detecting common cropping problems such as text shifted to the edge of the image, unwanted page borders, or unwanted text from a previous page on the image. One contribution of this work is a definition of the evaluation use cases for cropping problems. A second contribution is the creation of a reliable expert tool for document cropping error detection based on image profiling techniques. This tool can be applied in quality assurance workflows for digital book collections. Our suggested method employs evaluation parameters that can be defined for each book. The tool works independently of the image size, format and colour. We have analysed two real world collections with correct and corrupted images, and our tool has demonstrated good recall and precision for both corrupted image and correct images.

Keywords: Digital library, Quality assurance, Cropping

### Quality Criteria for Architectural 3D Data in Usage and Preservation Processes

### Michelle Lindlar<sup>1</sup>, Martin Tamke<sup>2</sup>, Morten Myrup Jensen<sup>2</sup> and Henrik Leander Evers<sup>2</sup>

<sup>1</sup>German National Library of Science and Technology (TIB), Germany <sup>2</sup> CITA – Centre for Information Technology and Architecture, Germany

**Abstract:** Quality assessment of digital material has been just one of the new tasks the digital revolution brought into the library domain. With the first big print material digitization efforts in the digital heritage domain dating back to the 1980ies, plenty of experience has been gathered and recommendations on best-practise published. Along the same line, libraries of today may often publish guidelines on formats or quality parameters for digital textual materials which enter their holdings.

While digital texts such as e-journals are in common use today, non-textual materials of various domains are just entering the holdings of cultural heritage institutions. An example for this is architectural data, which is of interest to a variety of libraries and archives – ranging from special collection libraries, such as the RIBA Library of the Royal Institute of British Architects, to national archives responsible for the archival of information about publically funded buildings. Architectural practise of today commonly includes 3D object processing. The output of these processes is slowly reaching the aforementioned cultural heritage institutions which are now facing the task of quality assessment of the material.

The paper will present a first analysis of potential quality factors and compare architectural and cultural heritage domain expectations in 3D data quality. It will look at two forms of 3D data: modelled 3D objects and scanned 3D objects. The work presented in this paper is based on work conducted in the ongoing EU FP-7 DURAARK project.

**Keywords:** Data quality assessment, 3D data, Architectural data, Digital preservation, Cultural heritage

### Quality Management Approaches in University Libraries of South-western Nigeria: A Mixed Methods Design

Halima Egberongbe

University of Sheffield, UK

**Abstract:** Academic libraries today are faced with the challenge of deciding on the appropriate means of improving the quality of their services to ensure efficient delivery of these services to better comply with rapid global development and to contribute to the growth of their parent institutions. Quality management models have consequently been

identified as the management frameworks that give libraries the necessary control to address risks and monitor and measure performance in their work procedures. There is, however, a paucity of literature to demonstrate quality management implementation in Nigerian academic libraries.

The study adopts a pragmatic approach to investigate the problem. It employs a mixed method – (i.e. both quantitative and qualitative data collection techniques) – to uncover quality management practices in university libraries in Nigeria, focusing on the southwestern zone of the country. The first phase of the study involved an online survey to assess management practices and quality service delivery in 30 university libraries of south-western Nigeria, to achieve the study objectives and address the research questions. The survey was aimed at eliciting information from both management and non-management staff of the libraries surveyed. The initial finding provides an understanding of the extent of readiness in the academic libraries under study to apply quality to their management procedures and services.

The second (qualitative) phase of study which is intended to be multiple case studies of university libraries earlier surveyed will involve semi-structured face-to-face interviews with two participants to be chosen from each case library. The method of data collection to be used for this phase of study will be in-depth interviews to be conducted as a follow-up to the questionnaires, to generate data for the purpose of building upon the earlier data and integrating the two phases of study. Focus group discussions will also be held in these universities in addition, to complement the interviews.

This study intends to generate an empirical-based framework for implementing quality management in academic libraries in Nigeria. The project also hopes to contribute to a deeper understanding of QM practices and quality service delivery in university libraries both in south-west Nigeria and in Nigeria as a whole.

### Quality of Health Information Mediated by University Libraries in Brazil and Germany

Eduardo Alentejo, Sofia Baptista

UNITRIO, Brazil

**Abstract:** This qualitative and quantitative research investigates the theme "quality health information mediated by university libraries". From the literature review, it includes the quality of health information mediated by university libraries as being a product oriented by management quality. Through empirical study in academic environments in Brazil and Germany: Medical University of São Paulo, and the Justus Liebig-University, respectively, it aims to evaluate the quality of health information. Upon application of the method 'information system on quality', it concludes that the evaluation of the quality of health information is composed of several elements of information management and quality, including studies of users and creating criteria for perceived quality by managers and university libraries in the area of health.

**Keywords:** Information Management, Health, Quality of health information, University libraries in health, Health information system, Quality Management System of Health Information, Library's user study

### Real-time Reading: A Twitter-based Diary Study of College Students

### M. Cristina Pattuelli, Elizabeth Kaufer, Gina Shelton, and Storey Sitwala, Pratt Institute

**Abstract:** As part of an ongoing research project focused on the use of e-books and e-reading devices (e.g., Kindle, Nook, iPad) in academic environments, this study reports on a novel methodological approach to investigate everyday reading habits of college and university students. Traditional qualitative research methods, including interviews and questionnaires, can effectively shed light on the behavior of readers, especially on their perceived motivations, preferences and expectations. To gain a broader understanding of the factors involved in the adoption and use of e-books, it is critical to capture data on the everyday life context in which reading practices occur. To this end, we used a novel diary research technique that relies on the use of the very popular microblogging system, Twitter, to record actions and observations in real time. Diary research has long been recognized as an effective instrument to gather self-observation data that offers direct insight into individual life events. The effort and time commitment, however, required from study participants is a limiting factor that affects data accuracy and completeness (Pickard, 2007). The fast, easy and ubiquitous qualities of Twitter have the potential to overcome some of these limitations.

A Twitter-based diary method was designed and piloted in the fall 2013. It was part of a three-phase study including focus groups and semi-structured interviews conducted on a total sample of 11 undergraduate and graduate students from two New York City universities. First, two focus groups were held to gather preliminary data about studentsB' reading preferences and habits. A Twitter diary session followed that involved seven participants over a period of one week. Finally, a series of seven one-on-one post-Twitter interviews were conducted to elaborate and dig deeper into the diary data.

While the data collected are currently under a second round of analysis, preliminary results show that the methods adopted were successful in harvesting a particularly rich and varied collection of data useful for supporting the interpretation of different facets of participant behavior. Themes that have emerged include: environment, interaction, annotation, text manipulation, and reading strategies.

Our presentation will address the study results as well as the design and evaluation of the methodology adopted. We will focus on the Twitter-based technique for diary research to share the benefits and limitations and the general lesson learned from using a promising new approach to ethnographic data collection.

Work cited:

Pickard, A. J. (2007). Research methods in information. London: Facet.

Key Words: information behaviour, diary research, e-readers, e-books, reading, technology adoption, academia, qualitative research methods Propose a Special Session (YES/NO): YES Special Session

# A Real-world Implementation of Multi-Project Management at the German National Library of Science and Technology

### Debora D. Daberkow and Uwe Rosemann

German National Library of Science and Technology (TIB), Germany

Abstract: Multi-Project Management is a method to simultaneously look at multiple projects and gage their actual and projected progress, impact and overall importance towards an institution's declared strategic goals. It is also a method to help foresee and manage possible conflicts in terms of resource management. This combination makes it a powerful tool to be used as steering technique for management as well as increasing transparency within the organisation. In this paper, we describe the approach we took in designing and implementing the method at the German National Library of Science and Technology (TIB) and draw first conclusions on aspects of the implementation to date. The main motivation for introducing a systematic method for managing all projects concurrently was the need for good resource allocation. While the number and complexity of the projects both underway and of those planned was continually increasing, the number of people involved in the projects who could work on them remained limited. This lead to a risk that projects would not be completed on time, and that people were given more tasks in parallel that they could efficiently accomplish. Hence, there was a need to systematically assess and prioritize projects to ensure that the most important were stared and completed first, and that other projects would only be started when the capacity to accomplish them was truly given.

The TIB answered this challenge by first analyzing the situation, identifying suitable methods and then creating a concept as to how the methods should be put into practice. A multi-project-management process along with a process to manage the single projects was implemented. These processes are supported be a software implementation tool to help analyze the projects and the allocated resources in order to view conflicts ahead of time and make decisions accordingly.

In addition to helping with resource allocation and prioritization of projects, the new process and system are also designed to increase transparency within the organization. The software and processes have now been productive since the last quarter of 2013, at first encompassing the IT and research and development departments. It is planned to include all departments in the future, once the processes with the pilot departments have reached a certain level of operational maturity.

Reference Transaction Analysis in Multiple Dimensions Wendy Allen Shelburne and Lynne M. Rudasill University of Illinois at Urbana-Champaign, Urbana, Illinois, USA

Abstract: The University of Illinois Library implemented the Reference Effort Assessment Data (READ) Scale and began to use a tool called Desk Tracker in the majority of its reference units to better understand the level of expertise and staffing needed at the point of service to our users in 2011. The locus of the reference event has shifted from traditional reference desks in multiple units to the implementation of virtual reference and in-person reference service from central hubs. Questions that require specialized knowledge are referred to those with the requisite expertise or arrive without prior mediation. More often than realized, questions related to the online resources of the University Library are sent either directly or through referral to the electronic resources librarian. This study seeks to discover the frequency of those questions related to online resources, and the extent to which shared knowledge is necessary to effectively and efficiently provide our users with the information they need, where they need it and when they need it. This study will assist us in developing better training for all individuals in the library who answer questions from our users.

- How do the questions differ between electronic resources and more traditional questions?
- What training is necessary for the front line reference staff?
- Are we causing delays for our users who need access to specific electronic resources? We will use data from Desk Tracker, virtual chat transcripts, and the questions received by the electronic resources librarian to provide a picture of what we are doing and how we can do it better.

**Keywords:** READ Scale, Electronic resources, Reference, E-resources librarian, Assessment, Training, Interdepartmental cooperation

### Reliability and Validity of LibQUAL+TM Scores for Different Language Translations

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**Abstract:** LibQUAL<sup>+TM</sup> is a suite of services that libraries use to solicit, track, understand, and act upon users' opinions of service quality as measured along three dimensions: Affect of Service, Information Control and Library as Place. These services were developed on the basis of numerous studies and an extensive research program developed by the Association of Research Libraries (ARL) in partnership with Texas A&M University Libraries. The program's centerpiece is a rigorously tested Web-based survey, also known as '22 items and a box.' LibQUAL<sup>+TM</sup> has expanded internationally,

with participating institutions in many different countries. In this paper we will focus our analysis on data translated in languages in the regions that are close to Turkey geographically, namely we will focus on the LibQUAL+ translations in Greek, Hebrew and Arabic. This paper will describe (a) the historical context in translating the LibQUAL+TM in other languages, (b) an overview of the functionality of the current web interface in handling different languages, and (c) a reliability and validity analysis for the following language versions: Greek, Hebrew and Arabic. As Thompson has indicated before tests are not reliable or valid. It is rather the scores (and not the tests) that can be analyzed for reliability and validity purposes to determine whether a specific measurement has produced valid and reliable scores in the context of its specific implementation. The importance of the contextual elements of measurement are more obvious when one is dealing with translations of an instrument, i.e. linguistic variations of constructs that are hypothesized to have universal dimensions across languages and cultures. In the LibQUAL+TM context as libraries from other countries approached ARL to implement different language variations of the instrument, the need to systematically understand whether the new versions of the survey instrument created are measuring the same constructs as the original instrument was a key question that needs to be answered. Understanding whether a translated instrument has produced reliable and valid scores in some ways is similar to studying the reliability of two parallel test forms that are hypothesized to be equivalent.

Historical context for introducing new languages in LibQUAL+ $^{\rm TM}$ 

In 2003, LibQUAL+TM was implemented for the first time in two different language variations, British English and Canadian French. The British English implementation was initiated as a partnership between ARL and SCONUL. The Canadian French implementation was led by the two ARL member institutions, Laval and Montreal, that are located in Quebec. The reliability and validity of these scores has already been reported in previously published studies. In 2004, LibQUAL+TM was implemented again in British English and Canadian French in addition to a Continental French variation, as well as, two new language translations, Swedish and Dutch; additionally, in 2005 the survey instrument was also implemented in Africans. The Continental French version of the survey was developed through the French library that participated in LibOUAL+TM through the European Business Schools Librarians Group (EBSLG) and used as its parent instrument the British English version of the survey. The Swedish and Dutch versions on the other hand used as the parent language the American English version of the instrument. From earlier published research we had established that the two English versions, the British and American, had produced scores that are equally reliable and valid in measuring the three dimensions of library services quality that LibQUAL+TM describes, affect of service, information control and library as place. The Swedish implementation was led by a group of academic libraries but in addition to those we had three Swedish hospital libraries. The Dutch implementation was led by an academic institution. In 2005, we also translated the instrument in Africaans as a group of academic libraries in South Africa expressed the desire to implement LibQUAL+TM in 2005. In more recent years, the instrument has been translated in Hebrew for implementation by the University of Haifa in Israel, in Greek for implementation by the University of Cyprus in Larnaca, Cyprus, and in Arabic for implementations in Bahrain and Saudi Arabia.

The translation process

In developing the translation process for other languages, we studied the practices of Canada, a bilingual nation, that supports all official documents in two languages, English and French. As reported in earlier articles, we follow a process where the institution interested in implementing LibQUAL+TM in another language assumes the responsibility

of developing the first translation or modification to its existing linguistic variation. We describe this process in more detail in the paper. Once the 'participating library' provides the translation to ARL, we go through a reverse translation in the ARL offices usually by hiring an outside translation office. We compare whether the meaning of the translated items seems to be similar to the meaning of the original and clarify any additional questions that may arise with the 'participating library.' Once we are satisfied with the language clarifications, we load the items on the website and the 'participating libraries' have the opportunity to review these items on the web. Changes to the text are harder to implement once the items are loaded to the database.

The online interface allows for multiple parallel language implementations. The University of Cyprus implemented the survey in three different languages simultaneously (Greek, Engish and French) which is the largest number of languages an institution used to this date.

Reliability and Validity Analysis

This paper reports the results of reliability and validity analysis of the scores of the Greek, Hebrew and Arabic implementations.

Conclusion

LibQUAL+TM has brought about a revolution in the evaluation of libraries. It has roots in extensive research that has taken place in the services marketing field and libraries over the last two decades with various modifications and applications of the SERVQUAL tool, the parent of LibQUAL+TM over the 1990s. While the foundational mission of research libraries is shifting, LibQUAL+TM is an evaluation tool that shifts the emphasis from the 'book' to the 'user' in an effort to help libraries keep in touch with the changing landscape from a user's perspective. In a book bound culture and tradition were libraries have their roots, the shift from studying books to studying people at the scale that the web-based LibQUAL+TM protocol has afforded us across hundreds of libraries and thousands of users is a conception that challenges our institutional, political and economic boundaries. It is striking how users in the multitude of contexts where we have applied LibQUAL+TM surface consistently valid and reliable scores along the three dimensions of library service quality: library as place, information control and affect of service. The need to mobilize our thinking to implement the management philosophy that the application of LibQUAL+TM calls for is a formidable challenge for the future of research libraries around the globe.

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## Religion and Reading: Testing their Association in a Brazilian Sample

#### Juliana R. Santos, Frederico A. de Carvalho, Mariza Russo and Maria das Graças F. Souza Filho

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**Abstract:** Religion is so firmly intertwined with books (or their equivalents) of several kinds along History that many people believe that, since the sixteenth century, the origin of some existing, institutionalized religions may be ascribed to several divergences relating to the freedom of reading and interpreting the Biblical texts.

What about reading habits at large in current days? Do they show any significant influence from religion practices? Through which dimensions of people's behavior does this influence reveal itself? In this paper we intend to empirically answer those questions as long as the most numerous Christian religions are concerned in Brazil.

Empirical evidence has been collected by means of a questionnaire applied to a convenience sample of 81 respondents divided into three equal subsamples of 27 subjects, each group corresponding to a particular denomination – Catholic, (traditional) Evangelical and Pentecostal. Sample size has been determined from ease of access. All respondents live around metropolitan Rio de Janeiro, Brazil.

The questionnaire included questions related to respondents' demographics as well as questions related to respondents' attitudes and opinions. There were twelve closed questions and one multiple-choice, in addition to an open question (not analyzed here). Questions refer to three topics – demographics (3), religion (6) and reading (4). Demographic data will be ignored here since they do not belong to the main focus in the paper

To test for the hypothesized association a set of nonparametric Qui-square tests has been used. Following the statistical requirements for test validity and significance, only two associations were confirmed, namely, there is a (statistically) significant association between (a) the respondent's religion and the frequency whereby she/he reads the Bible, and (b) the respondent's religion and her/his participation in the Church's reading / discussion groups.

Findings indicate that even today there seems to persist a marked difference among Catholics and the other two Christian groups with respect to reading the Bible, whereas no difference can be affirmed relating to non-religious texts (including the "reading" of sites and internet material). Also, non-Catholic respondents claim to engage in collective activities involving religious reading more frequently than Catholic ones. As a byproduct of collected data on those laic texts, an estimate of the reading index in the sample (percent of respondents claiming to read non-religious texts) amounted to more than 90%. Since every respondent claimed to belong to some denomination, this estimate may be taken as additional evidence on how religion does influence reading.

Keywords: Reading, Reading habits, Religion, Hypothesis testing

### Research Assessment of the Climate Change Data: A Scientometric Construct

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Abstract: As we perceive it in the contemporary sense, we smell that the climate change is the buzz blemish of research for governmental agencies, research institutes, academics in general and environmentalist in particular. There are vibrant and prominent climatic changes occurring all around the globe as can be visualized by the volume of research output produced in different corners of the world and the attention towards these arenas lead to many specialized researches to conduct the assessment and evaluation of the data produced. The present study analysed the climate change data in the last five years (2009-2013) as produced in the field of environmental science and ecology. The source of data used for the study is web of science and it was found that about 17, 266 number of publications are produced in the field from different research based institutes around the globe. The published data was highest in the year 2013 i.e., 4788 number of publications, and the lowest was that of the year 2009 i.e., 2238 publications. The highest number of publications was produced from USA followed by England. The Thuiller, W followed by Smith, P. were the most prolific authors in the field of climate change. The articles were the most widely used document forms followed by reviews. The prolific journals were 'climatic change' and 'Global change biology'. The study also assessed the citation patterns received by these articles and provides a comprehensive outline of the different aspects of the citations including the average, self and unique citations received. Keywords: Climate change, Environment sciences, Ecology, Scientometric study, Citation analysis, Research assessment

## Research Publications of CSIR – IICT Hyderabad, India: A Study

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**Abstract:** The study presents the trends in year wise R&D publications, citation value, category of journals, most productive authors, authorship pattern and collaborative research in chemical sciences with reference to Indian Institute of Chemical Technology, Hyderabad an R&D organization under CSIR, India. A total of 3225 articles downloaded from SCI – database in Web of Science during the period 2006-2011. For the purpose of analyzing the productivity of the scientists, the journal articles constitute the most important primary form of publications. During the study it is found that the highest number of 612 papers was published in the year 2007. Whereas the highest citations received were 7475 from 510 out of 561 papers published in 2006. Out of 3225 papers, four authored papers stood highest in number 912 with a percentage of 28.28. The average number of publications per year was 537.6 under the period of study and average

citation per paper is 7.31. Majority of the scientists of this lab preferred to publish their research work in joint authorship (99.97%). The degree of collaboration C over the 6 years (2006-2009) is 0.98 and is almost same in all the years.

### Research Journal of Physical Education and Sports Sciences, the SHIELD: A Bibliometric Study

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**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 its Editorial Board from within the country and outside the country.

**Keywords:** Bibliometrics- Pakistan, Bibliometric- SHIELD, Sports Journal-Bibliometric study, Pakistani Resarch- Bibliometrics

### Research on Organizational Structure Changes of National Center Library ROC

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**Abstract:** The paper is a research on organizational structure changes of National Central Library of Republic of China (NCL) from 1933, the first year being established,

to the current year of 2013. Now, the NCL in 80 anniversary celebration also begins to adapt its newly promulgated organizational law and change its new organizational structure in 2013. During the NCL 80 years' history, the library has encountered lots of political, social and cultural changes, economic improvements, and technological impacts, it continuing making changes to get with all changes. Using literature reviews, historical research and content analysis as research methods, the paper aims to discuss: 1. the being issued organizational laws of NCL 80 years' organizational changes; 2. the organizational structure changes of NCL departments transformation; and 3. and national library's different functions and changes related factors. The findings includes: 1. total five times of organization laws being issued during the NCL 80 years history developments; 2. important departments (acquisition service, cataloging service, reader services, reference service, technical services, international cooperation, librarianship department and information service) continue making changes all the times to pursue the library's innovations; and 3. to ascribe all organizational structure changes factors of NCL on social and cultural, economic, technological and political changes, and all related to the functions of national library in different decades. To sum up, the NCL organizational structure model is a bureaucratic and functional department structure, which is not flexible and effective enough for the library to deal with all the changing conditions. Within the changing of the library unstable external and internal environments, the NCL shall modify its organizational structure constantly to fulfil its functions with the environments. Finally, the research concludes that the constant change of organizational structure is one of the best ways for a library to pursue its innovative and sustainable developments under different era and with the increasing turbulence and uncertainties of environments.

### 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

## Resource Sharing among University Libraries in Nigeria in the 21<sup>st</sup> Century: Problems and Challenges

Abubakar Ladan<sup>1</sup>, Umma Dauda Daura<sup>2</sup>

**Abstract:** The study examined the situation of resource sharing among university libraries in Nigeria, and the achievements driven from the cooperation. The study also identified the level of resource sharing among the cooperative libraries. Qualitative research methodology was adopted: data was collected through interview. The study was limited to Federal University Libraries in North western Nigeria. Purposive sampling technique was used to select two staff from each library as participants of the study. Finally, the study identified problems and challenges associated with resource sharing among university libraries in Nigeria and came up with the solutions to the identified problems.

Keywords: Resource sharing, University library, Challenges

### Rethinking Information Literacy and Advancing Pedagogical Research as Collaborative Work with Teaching Faculty: The Use of Quantitative and Qualitative Methods

#### Asako Yoshida

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**Abstract:** Information Literacy continues to be an important professional agenda conceptualizing and advancing academic librarians' teaching roles for the 21st century (Secker & Coonan, 2012). In this paper, the author advances the librarians' proactive involvement in the Scholarship for Teaching & Learning as an alternative means to promote more effective approaches to develop and enhance teaching and learning of

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research skills on campuses. She will draw her pedagogical research stance from the experiences of: 1) a blended learning project involving two different 2nd year undergraduate foundational courses in the Faculty of Human Ecology, and 2) another pedagogical research project for a 4th year research seminar course in the Department of Human Nutritional Sciences. The blended learning project, which was initiated collaboratively by the author and her writing instructor colleague from Academic Learning Centre, utilized both quantitative and qualitative methods to explore how students experienced blended learning as they worked on research paper assignments. The project was developed into a case study by comparing and contrasting two different course circumstances (Yoshida, 2013). The other, ongoing research project is being developed as action research to inform and exchange current practices among all course instructors and thereby to explore better ways of facilitating student learning and organizing teaching and learning activities for the course. The action research involves: rearranging course design and delivery, and administrating pre- and post-questionnaires that help students reflect on their research skills and attitude towards doing research, as well as keeping of instructional logs by the librarian and the course instructor, among other activities, to help assessing the course design and delivery. The project is being undertaken in a close collaboration with teaching faculty and is designed to inform instructional practices and student learning in the course at the Departmental level.

#### Review of Administrators, Role in Strategic Planning to Improve Staffs, Practice in University Libraries (ULs) of Sari Province

Salimeh Tahmasebi, Sedighe Mohammadesmaeil

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**Abstract:** The study aims to review library administrators, role in strategic planning to improve staffs, practice in Sari universities. It is a descriptive-survey study. The statistical population includes 41 library administrators and staff in Sari province but 35 subjects responded to the questionnaire used to gather the data. The data indicate that there is a significant relationship between administrators, strategic planning and staffs, job satisfaction increase, organization a commitment, working conscience increase, job motivation, and communicational productivity and skill.

**Keywords:** Strategic planning, Job satisfaction, Organization a commitment, Working conscience, Job motivation, Communicational productivity and skills

A Science Digital Archive for the Planetary Science Community

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Abstract: The Planetary Data System (PDS), NASA's planetary science digital archive, is tasked to ensure long-term preservation and usability of science data in several science domains. After two decades of operation, the PDS had a wealth of lessons learned about the approaches pursued to collect, preserve, and support the distribution and use of science data by the user community. With this legacy, the PDS embarked on a complete system redesign starting with the definition of an explicit, over-arching system architecture that would scale to meet the future needs and leverage new information technologies. Just released this year, PDS4 uses an explicit model-driven architectural approach coupled with modern information technologies and standards to support both system development and evolution. International partners are already putting PDS4 to work for their missions, and systems are now being integrated to form a world-wide planetary data archive under the auspices of the International Planetary Data Alliance (IPDA). The experience has shown the importance of having an explicit architecture and ensuring that development follows a principled approach that is coordinated with the research community. This paper will provide an overview of the PDS4 infrastructure including its architectural principles and domain information model and how they support system interoperability and data correlation in the planetary sciences.

Keywords: Science Digital Archive Information Model

## Scientiometric Analysis of Research Output at Indian Institute of Technology Bombay

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Abstract: Indian Institute of Technology Bombay (IITB) established in 1958, is a world class institution offering programs of higher learning with a strong focus on research in engineering, technology and sciences. It has 15 Academic Departments, 9 Centres, a School of Management and four Interdisciplinary programmes. Over the last five decades, about 39,000 engineers and scientists have graduated from the institute. In tune with its vision, "to be the fountainhead of new ideas and of innovators in technology and science", it constantly reviews and restructures curricula and contents as well as exploits new advances in technology to enhance quality in research. Besides offering undergraduate and postgraduate programmes, it offers doctoral programmes in over 44 areas of engineering, sciences and management. IIT Bombay has made concerted efforts to align its R&D focus with the national goal of achieving technological self-reliance as well as to keep pace with expanding frontiers of knowledge and global developments. This paper describes results of a scientometric study of the research activities at IITB. It evaluates the research output (publications) of IITB from 1970 to 2012 as indexed in the Thomson Reuter's Web of Science citation databases using a number of indicators. The study reveals that there has been a consistent increase in number of high quality publications being published by IIT Bombay researchers including those in collaboration with several national and international organizations. It not only indicates increase in the total number of publications produced but a large portion of them (~50%) being published in high impact factor journals particularly in the last 10 years. This compares well with the increase in the number of Ph. D. degrees awarded during the same period. Average number of papers by each researcher has also increased from 0.99 in 2001 to over 1.9 in 2009, and about 70% have been cited with an average of over 6.5 citations per paper. There were 3 papers receiving more than 500 citations, 50 papers receiving 100-300 citations, and 175 papers having 50-99 citations. IITB recording the h-index of 80. The study further revealed that a significantly large number (>50%) of papers are being published in top ranked journals in almost all subjects during last decade. The study also shows that IITB researchers have collaborated with researchers in 90 countries of the world. These are clear indications of growth in research output both in quantitative and qualitative terms. IIT Bombay, therefore, continues to attract bright young researchers to its fold and receives offers of collaboration and funding from various national and international agencies.

**Keywords:** IIT Bombay, Scientometric study, Research performance analysis, Bibliometric study, Research indicators, Citation analysis

# Scholarly Contributions by Professional Librarians in the Arab World: A Comparative Analytical Study Mahmoud Zakaria, PhD

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Abstract: For the Library and Information Science (LIS) field in the Arab world, there is no any previous accepted study conducted in order to determine contributions by professional librarians who published scientific articles especially in its scholarly journals. This study examined the Contributions of Arabic Professional Librarians to the literature in (LIS) in the Arab World. Eight refereed Arabic journals in LIS were examined from the first issue for each journal to 2010. Peer-reviewed scholarly Journals, in the present study, were chosen because of the important role they play in scholarly communication system and because they are an open channels for both faculty members and librarians to participate in scientific activities. During the time frame of the current study, the sampled journals published 284 issues. The eight journals contained 1.526 peer-reviewed articles written by faculty authors in LIS departments, professional librarians, post-graduate students and other. The author think that the current study will serve as a benchmark of research productivity for the profession of librarianship in the Arab region. This study sought to establish and compare the research and publication patterns and output of Professional librarians in the Arab world. The main objectives of the study were as follows:

- To establish why academic librarians publish;
- To establish the quantity of publishing;
- To determine where academic librarians publish;
- To study the publishing trend of academic librarians;
- To examine what academic librarians publish; and
- To determine the level of collaboration.

Although the academic writing is one of the most important activities an academicians can do, the study suggests that it also important for who are work in the practice

environment and deal with realty closely. For librarians as a professionals, the academic writing can provide an important kind of self-education.

Keywords: Professional Librarians, Scholarly communication, Academic Librarianship

### Searching for Engineering-related Information Sources in Specialized Library Portal of Sazeh Pardazi Consulting ENG. Co.: Behavioral Patterns and User Experience

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Abstract: The information world of engineering is unique, complex, and increasingly fragmented. Engineers, librarians, and information specialists appreciate the frustrations associated with this discipline, but little is known about how engineers find what they seek. This study attempts to observe engineers' behavior while using SPI specialized digital library portal to search for specific engineering information. SPI library portal consists of more than fifty thousand electronic documents, books, maps and photographs.30 engineers, 6 person from 5 departments of SPI Co. such as Structures & Industrial Utilities, Coasts- Ports & Marine Structures, Oil- Gas & Petrochemical Ind., Water & Environment and Hydrography - Photogrammetry & Ground Surveying participated in this study, and each performed 5 specific tasks. During the search process, each team search about their department favorite topic. They submitted short queries or complete questions, and they examined less than 4 results per search. When they did, they tended to make a query more specific or more general, or iterate in different ways. Participants also browsed, primarily relying on the subject search to navigate to specific topics and concentrate on accessing for documents rather than answers. Participants overall had a positive experience with library portal, and the experience was significantly correlated with task difficulty and participants' search abilities. The results suggest that library portal system need for a natural interface to ask questions and expand the notion of keywords.

**Keywords:** Sazeh Pardazi Consulting ENG. Co. (SPI), User experience, Behavioral patterns, Digital Library Portal, Engineering-related information

### 'Sense-making Theory' and its Application for Support of Information Seeking Behavior of Users in Database User Interfaces

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**Abstract:** 

**Introduction/Goals:** Scientific databases are the most important and useful sources where the information is accessible via user interfaces. One of the approaches to eliminating the existing challenges in databases' user interface is utilizing Sense-making Theory (SMT) approach. SMT approach helps the user to understand problematic situations they have faced with and bridges cognitive & information gap by using elements of user interfaces. The goal of this study is to evaluate user interfaces of Ebsco, Proquest and ScienceDirect databases in supporting users' information seeking behavior based on SMT.

**Methodology:** This study was a mixed method survey. Population of this research has been chosen among M.A and PhD students within Humanity/Social Sciences and Basic Sciences/Engineering & Technical Sciences fields of study in Ferdowsi University of Mashhad.

**Findings:** Findings showed that SMT elements support users' information seeking behavior in databases' user interfaces which have been analyzed. It is also figured out that the help of databases' user interface to users' information seeking behavior was in desired level.

**Conclusion:** This study showed that the current user interfaces in these databases not only cannot support the user's information seeking behavior in problematic situations but also put them in confusing and ambiguous conditions. Furthermore, the results indicate that elements of Dervin's SMT are applicable to database user interfaces are probably effective in re-designing and improving these environments.

**Keywords:** Sense-making Theory, User interface, Brenda Dervin, Database, Information seeking Behavior

### Service Assessment in Public and School Libraries: A Study Combining the Use of Benevox® and LIBQUAL+® in the State of São Paulo, Brazil

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**Abstract:** A case study is described, the aim of which was to evaluate service quality in two public libraries and one school-community library in a town located in the interior of São Paulo state, Brazil. An adapted form of LIBQUAL+® was used to carry out the assessment here reported, being used in conjugation with semi-structured interviews based on the questions used in the Benevox® software. Data processing of the survey results, and indexing of the user comments were carried out using PSPP and *The W32* thesaurus software respectively. The dimension Affect of Service was the most positively assessed in two of the three libraries, but a perplexing result was that in the school library, users referred to the "invisibility" of service and attendance by professionals.

Keywords: Public library, School library, Service assessment, Quality management, LiBQUAL+(®, Benevox(®)

## Shut Down the University! - The Ultimatum for Quality Undergraduates

#### Iliasu Jinadu & Kaur Kiran

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Abstract: This empirical study examines the fundamental requirements to achieve effective information literacy (IL) programme in a developing country such as Nigeria where university lecturers embarked on an industrial action for six months (in 2013) to press home their demands, among others, of preparing undergraduates to be fit for the twentieth century workplace. This study is concerned with investigating if the situation in colleges is also in dire states, specifically focussing on the issue of information literacy practices of teaching staff at the Colleges of Education. An information literacy at the workplace model was formulated through a systematic critical review of the literature. The model is then verified through grounded data from respondents who are lecturers at the College of Education. The study uses an inductive approach using rich data from interviews, focus group discussions and observations between July, 2013 and January, 2014. Data analysis of the interviews transcripts was manually done and results mapped to the proposed model. Results show that: (1) academics hold divergent perceptions of IL based on their field of study and (2) the information infrastructure on campus has not encouraged IL practices. Some of the recommendations of the study includes: (1) improved capital development of lecturers in colleges of education and (2) high investment in education to improve the information infrastructure that would effectively improve the information literacy (IL) skills of undergraduates. Apart from the theoretical model which this study has contributed to existing knowledge of IL concept and theory, the study has also created a platform to further scientific growth in IL practice and research.

### Six Decades of Doctoral Research in Library and Information Science in India: A Study from 1950 to 2013

Dr. M. R. Murali Prasad<sup>1</sup> and Chintha Nagabhushanam<sup>2</sup>

**Abstract:** This paper presents a quantitative analysis of Six Decades Doctoral research in the field of Library and Information Science (LIS) in India. The authors carefully analyze the bibliographical details of doctoral degrees registered and awarded by Indian Universities in LIS from 1953 to 2013. The article depicts the chronological growth of the doctoral research in six decades, and the data have also been analyzed university wise, subject wise, state wise and research super wise. Through this study, the researchers can easily trace the research trends and able to find the research gaps in LIS in India.

**Keywords:** Doctoral Research, Library and Information Science, Bibliometric Study, Indian Universities, India

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### Skills and Knowledge Needs Assessment of Future Library Professionals in the State of Qatar: A Survey of LIS Students, Library Professionals and Library Managers

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**Abstract:** The profession of librarianship in the State of Qatar is currently in a phase of rapid growth, development and transition. The Qatar National Vision 2030, which defines the long-term outcomes and provides a strategic framework for the country, is one of the main drivers for this change process. The creation of the Qatar National Library, scheduled to open in 2015, is a key development in line with the Qatar National Vision 2030 and places libraries and librarianship at the forefront of the country's future plan. In addition, a number of other new libraries have also recently opened or are scheduled to open in the next few years and a new MA in Library and Information Studies has recently been launched at UCL Qatar.

One of the challenges in developing a library and information studies programme in a rapidly growing region is how to meet the specific local needs of library professionals and libraries now and in the future. The authors wanted to successfully understand and meet the specific skills and knowledge needs of emergent library and information professionals in Qatar, notably in terms of specialised or local requirements. Given that a detailed needs assessment of this kind has not previously been undertaken in Qatar the purpose of this research is to investigate and document the skills and knowledge needs of future library professionals in the country and to use the outcomes of this research to produce a set of recommendations for library educators and library managers. The intention is that these recommendations can be applied to help develop or refine Qatar focused LIS course curricula in an academic setting and also guide or improve professional development plans in a practitioner setting.

The aim of this paper is therefore to present the findings of a skills and knowledge needs assessment investigation that will be carried out in January and February 2014. This will be undertaken using an electronic survey instrument which will be targeted at representatives of three stakeholder groups: current LIS students at UCL Qatar, library professionals working in Qatari libraries, and managers of libraries in Qatar. The population to be surveyed (n=50) will be selected using a purposive sampling technique and the data will be collected using predominantly quantitative methods, although qualitative responses will also be invited at the end of the survey. The data will be analysed and results discussed and separate recommendations for both LIS academics and library managers will be presented in the form of guidelines.

Keywords: Library skills and knowledge, Needs assessment, Guidelines, Qatar

Slam the Boards: Librarians' Invasion into Social Q&A Sites

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**Abstract:** Social Q&A sites, also called "question-answer sites" and "answer boards", are becoming increasingly popular as an online source for people's information needs. It is defined in a broad sense as a service that involves 1) a method for a person to present his/her information need in natural language (mostly a question, and not a collection of keywords); 2) a place where other people can respond to somebody's information need; and 3) a community built around such service based on participation (Shah, Oh & Oh, 2009). An example of social Q&A sites is Yahoo! Answers.

Since 2007, reference librarians in the United States have been involved in a grass-roots attempt to visit social Q&A sites on the 10<sup>th</sup> of each month and answer as many questions as possible. This activity is called "Slam the Boards". Through this activity, librarians hope to encounter users beyond the library and provide well-sourced, dependable answers to people's questions, and to make people aware that librarians and libraries can be valuable source not just for books, videos, etc., but also for mediated answers to questions and referral to appropriate sources and organizations.

This study seeks to develop an in-depth understanding of "Slam the Boards" through qualitative interviews with librarians participating in this activity. The interviews focus on the motivation, experience, and reflection of the participating librarians. Findings from the study will provide a detailed depiction of "Slam the Boards" and its value in library marketing and advocacy, and yield insights on how to efficiently and effectively promote library resources and services beyond the library. Librarians and libraries will benefit from the study and gain valuable ideas of marketing and outreach, which will ultimately increase people's awareness, use and perception of the library.

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### Smartphone Addiction among Sultan Qaboos University Undergraduates

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**Abstract:** In addition to the study's main focus on Smartphone addiction among SQU undergraduates, it also investigated particular issues such as the following: Smartphone applications and activities that students were most addicted to, the impact of addiction on academic achievement, and addiction variation according to gender, field of study, parental education and family income. A questionnaire was distributed to a random sample of 140 undergraduates (37.1% males and 62.9% females).

Findings revealed that what the study calls a casual level of addiction (42.3%) was the most common, followed by a heavy level (30.8%), and finally a moderate level (26.%). While messaging was the activity students were most addicted to, no significant differences were found that related to academic achievement. Males were more addicted than females, but nothing significant emerged in relation to field of study, parental education and family income.

### The Social Functions of the Thai Wachirayan Library, 1881-1905

#### Brendan Luyt<sup>1</sup>, Chirabodee Tejasen<sup>2</sup>

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**Abstract:** Libraries are everywhere and always a part of the social fabric of the culture that produces and uses them. The Wachirayan (National) Library of Thailand is no exception. Patrick Jory (2000) has already drawn attention to its nation-building work; our contribution is to argue that it performed more than one role. As well as helping to build the modern Thai nation-state, it also was helping to construct the modern Thai elite to govern that nation. We present three examples of the library's functions in action. Together these examples portray a library heavily involved in the society of which it was a part.

- 1) Wachirayan as a means to accumulate modern knowledge: Earlier collections focused more on Buddhist texts and manuscripts and tended to be viewed as symbols of social status. Emphasis was on the preservation and ownership of the collection rather than access or use. The notion of library a repository of books accessible to all and available to members for use was novel in Siam. Libraries in this sense strived to be more encompassing, with a 'fuller' collection of written works gathered from a wide variety of sources. And it was such a new conception, among the Siamese elite, that underlay the foundation of the Wachirayan Library.
- 2) Wachirayan as a club: The idea of social clubs spread along with the expansion of colonialism, through the colonial expatriates and the media available at that time. By the 18th century, clubs and societies were established in Caribbean, Canadian, African and Indian port cities. They were modeled after their 'parents' in Europe. In most cases, members were Westerners, with an exception for one in Calcutta, where membership was granted to a few locals with Western education. In Siam, the royal elites were among the first to learn about social clubs. Indeed, Chulalongkorn himself witnessed many during his visit to Singapore and Batavia in 1870. As the elites absorbed more ideas regarding Western social practice, they began to partake of the same, albeit with modifications. In this way, Wachirayan served also as a club for social elites prior to its transformation to a public library after 1905.
- 3) Wachirayan Library as a centre for educational recreation: Another important aim of the library was to act as a place to showcase in an informative manner various activities and objects see as enlightening or otherwise capable of enhancing the status and power of the Kindgom (handicrafts, theatrical performances, among others).

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### Specific Aspects of the Information Services Quality Improvement in the University Libraries

Dr. Cristina Albu, Dr. Adriana Cristian

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**Abstract:** The services represent a dynamic area in the modern economy being also a research field of theoretical interest. The particularity of the paper consists in adapting the quality management techniques and tools in university library activities and specific document elaboration. There are presented tools successfully used in evaluation of services quality. These tools (ie. the causal analysis by Ishikava chart) represent a novelty in the library field. We aim to find answers to some questions as: which is a "service" definition? (a different approach to the service concept in libraries); which are the possibilities of improving the quality in service delivering?; which are the users' perception (feedback) regarding the services? The paper presents an example of an assessment of the provided services in an academic library by Ishikava chart.

Keywords: User, Quality, Service, Academic library, Ishikava chart

## Statistics for Assuring Evaluation Sustainability: The Case of Lithuanian Cultural Sector's Organisations

Dr. Jurgita Rudžionienė

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**Abstract:** The evidence of impact and value of cultural sector organizations are extremely important today striving to efficient activities and value demonstration to different stakeholders. Statistics makes substantial background for evaluation and assures sustainability of those organisations as well as their performance evaluation. Appropriate statistical data and information are crucial for advocating, marketing and managing as well as demonstrating the impact of the cultural organizations to their users enabling sustainability assurance of their activities.

Evaluation of activities, articulating and demonstrating the value and impact as well as overall performance and its results is still challenging for cultural sector. It makes particular difficulties for developing an adequate institutional management and library administration. Efforts to find the best ways for creating and implementing evaluation culture for information institutions, including libraries, archives and museums should be made.

The aim of the paper is to analyse the state-of-art of statistical activities and evaluation of cultural organisations in Lithuania. Libraries, archives and museums are chosen for this analysis. Both standardised and non-formal approaches and methods are contextualised and discussed. An attempt to state major scope and limitations in those organisations from statistical point of view is done. Results and further possible actions necessary for

assurance of sustainability of cultural institutions based on statistics of cultural sector are presented.

Keywords: Library, Museum, Archive, Statistics, Evaluation, Cultural sector

### How to Stay in Touch with Researchers and Teachers in Academic Libraries? Lessons Learned from Experiences in Université Libre de Bruxelles (ULB)

#### Christian Brouwer

Université Libre de Bruxelles, Belgium

Abstract: Researchers and Professors are coming less and less into library buildings. They can create their own work environment on their desktops or laptops, access material online, and get electronic tools to manage it. As a consequence librarians are less and less in touch with them. This is not to say that researchers and teachers don't use libraries. But they use them in a virtual way. So academic librarians have now to contact them instead of being contacted by them. This paper will investigate methods librarians use to be in contact with researchers and teachers, and which ones have been experienced in Humanities and Social Sciences Library of the Université libre de Bruxelles (ULB). Librarians have to create an environment where researchers are feeling that the Academic Library can fill their needs. In order to do that, the first step is to communicate to each other. According to the disciplines, needs and behaviour of the researchers vary largely. So the library needs to adapt itself to these behaviours. One way to do that is to specialize librarians in the contacts with one research community. It is also necessary to create occasions of meeting. There are many possibilities: presentations of survey results, seminars about publishing (possibly open access oriented), informal meetings about material use, training on databases uses, conferences or exhibitions held in the library, among others. In the ULB, for example, we experienced specialized meetings with researchers. First, we presented LIBQUAL+ survey results, ask researchers to say their opinion about, and discuss openly issues about material and services uses. The paper will show some hot topics discussed during these meetings and actual outcomes, such as better information of academic users, better knowledge of user needs and behaviour, improved understanding between libraries and Faculty. The contacts with teachers are also important. Because in Belgium researchers are almost all teachers also, teachers are the same persons than researchers but they are doing another job. For the time being we are engaged in transforming the library into a Library and Learning Center. We intend to provide and improve library teaching facilities. In this case we are combining student surveys and focus-groups with Faculty, in order to understand better present practices and future needs. This work is in progress.

#### Strategic Orientation and Attitudes for Marketing Academic Library for Sustainability

#### Osagie Oseghale

Kenneth Dike Library, University of Ibadan, Ibadan, Nigeria

Abstract: Academic libraries have long enjoyed their status as the "heart of the university." However, with the introduction of information and communication technologies (ICTs) for information generation, storage, processing, retrieval, dissemination etc in recent decades, higher education environments have changed. Following this change, experts are doubtful that with the advent of the Google Print Project, open access journal publishing, electronic repositories, and many other developments of the last few years, the nature and future of the academic research library are becoming less clear. Some have also argued that if librarians cannot meet the needs of students, scholars and administrators, they will turn to other sources of information and other service providers. This development exerts pressure on university libraries as never before to prove and maintain their relevance to their prime clientele as university librarians no longer can rely on their stakeholders' belief in their importance. Rather, they must demonstrate their value. Librarians are increasingly called upon to document and articulate the value of academic and research libraries and their contribution to institutional mission and goals. To remain relevant in the academic enterprise of universities, librarians must take a proactive approach, viewing strategic marketing of their services and resources as critical to their continued survival. This paper outlines strategic marketing orientation and attitude needed for academic libraries to delineate and articulate clearly their relevance to the academic enterprise and recommend action plans towards academic library marketing.

### Student Expectations and Competencies in the Digital Library Learning/DILL Master Programme

Sirje Virkus, Tallinn University

**Abstract:** This paper presents the results of the survey of the students' expectations and competencies in the Digital Library Learning/DILL Master Programme during the period 2007-2013. Since 2007 a diagnostic analysis (DA) survey was conducted among DILL students before they started their studies in Tallinn University. The goal of the DA survey was to clarify the needs and expectations of the learners for the IKM and HRM modules with regard to the content and delivery options. It was expected that it would enable us to tailor the IKM and HRM modules in the best way to suit students' requirements within the framework that had been set.

The objectives of the DA survey were:

- To gain information about the students' existing knowledge about IKM and HRM, prior to the commencement of the module so that the module can be delivered at the right level.
- To identify which topics and components of the modules, as set out in the original specification, are the most enthusiastically regarded by the

participants, and which are likely to be the most useful for them in their future work.

- To identify students' preferences concerning course organisation and delivery methods.
- To gain specific information about access to and familiarity with the technology available to the participants.

The data was collected during the period of 2007-2013. The data collection tool was a questionnaire. The questionnaire included qualitative free text responses and a limited number of quantitative tick boxes. The DA questionnaire was divided into five sections: (i) Background Information, (ii) Course Content, (iii) Learning and Teaching Process, (iv) Technical Support and Skills, and (v) Media Preferences.

The Background Information section requested demographic information including name, gender, age, country and previous job of the student. The Course Content section asked questions about previous experiences with IKM, the main authors who had influenced students' thinking about the IKM field, familiarity with IKM topics, the most relevant topics for them, and suggestions for module content. The Learning and Teaching Process section asked questions about students' learning experiences. The Technical Support and Skills section asked questions about the familiarity and usage of ICT tools and social software. The Media Preferences section tried to find out what is the preferred way of distributing learning materials for them, what file formats do they prefer for electronic learning materials, and what is, according to their experiences, the most effective communication channel during the course. At the end of the DA questionnaire respondents were asked to provide additional comments under the question 'Is there anything else that you'd like us to know?'

Keywords: Digital Library Learning/DILL Master Programme, Expectations, Competencies, Diagnostic analysis survey

## Student Satisfaction and the Completion of Academic Tasks Ngozi Okoro

Pratt Institute, USA

#### Abstract:

**Introduction.** This study investigated research habits in an academic setting to better understand factors contributing to student satisfaction in completing educational tasks. To achieve this goal, human information behavior models were applied to explain the student completion of specific academic tasks.

**Method**. A diary study was conducted to collect information about the student experience as it relates to the stages of information seeking behavior. Participants responded to six questions during the academic year while completing assigned tasks. The collected data was organized based on established models of information seeking patterns. This allowed for a student's satisfaction or dissatisfaction during a specific stage of information seeking to be identified and evaluated. It was then determined, within the given sample size, if a student's satisfaction is more influenced by their interaction with their device or the quality of the content retrieved from their chosen

**Results.** The results of the study showed that users satisfaction was equally influenced by their interaction with technology and the content of a resource. It also revealed that quality is an important factor in satisfaction. The quality of a resources content and the

capabilities of an electronic device greatly influenced user satisfaction. Further study into measuring the level of satisfaction is recommend to address the issue of quality and to quantify the effect it has on the level of satisfaction.

**Conclusion.** There is an abundance of research on information seeking behavior. As societies dependence on technology grows, the impact of technology on information retrieval continues to be an area of interest. Improving the understanding of the relationship between behavior, content, and technology as they relate to academic tasks will aid in developing curriculum that considers the range of factors that influence academic performance.

Keywords: Academic tasks, Human information behaviour, Student satisfaction

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### A Study about the Library of Pharmacy Faculty of Tehran University of Medical Sciences (TUMS) and Comparison with the University Libraries Standards of Iran

#### Sharareh Sharifipour

Tehran University of Medical Sciences (TUMS), Iran

**Abstract:** The present study is conducted aiming to consider condition of library standards in pharmacy faculty of Tehran medical science university in comparison with library standards in other Iranian universities.

The comparison was done for three standards: 1) the human resources regarding those staff who are engaged in Librarianship, information, and other related jobs; 2) the library

as a whole including print an non-print resources; and 3) library space. Some variables such as number of the students and faculty members are determining criterion.

This research is a descriptive study and data gathering tools include library standards in applied in the Iranian universities provided and published by Iranian National Library as criterion.

Findings show that the pharmacy faculty of Tehran medical science university library is in a medium level in case of human resources, in case of digital and printed references in high level and in case of the area space is taken in account in appropriately optimized level

Keywords: Library standards, Human resources, References, Library space

## A Study on Visitors' Experience at the Tang Dynasty Special Exhibition at the Asian Civilisations Museum

Sharon Chen<sup>1</sup> and Phoebe Cheng<sup>2</sup>

**Abstract:** The Asian Civilisations Museum in Singapore has been integrating participatory activities and interpretive materials into exhibitions that will allow visitors to access and enjoy cultural experiences. Recently, our volunteer guides underwent training in 'visual thinking strategy', to engage visitors in discussions and critical thinking. This methodology is adopted in the thematic guided tours for special exhibition, "Secrets of the Fallen Pagoda – treasures from the Famen Temple and Tang Court". This paper seeks to study the overall visitors' experience in the special exhibition from the use of the interpretive materials to the guided tours. This paper also seeks to document the volunteer guides' experience in adopting the 'visual thinking strategy' in their tours.

Keywords: Engagement, Visual thinking strategies, Volunteers

### Survey of Information Literacy Level in Law Students of Payame Noor University (PNU). Ashtian Branch

Marzieh Siamak & Ali Mostafapoor

Regional Information Center for Science and Technology (RICeST), Iran

#### **Abstract:**

**Purpose** - The purpose of this paper is to assessing of information literacy level in law students. This study report the results of a survey study of law students of Payame Noor University (PNU). Ashtian Branch.

**Design/methodology/approach** - In first phase, required data gathered on the base of the designed questionnaire based on Information Literacy Competency Standards for Higher Education, ACRL, by Davarpanah and Siamak (DAS). In second phase of the study, the information literacy of law students of the PNU 2013-2014 year was assessed by using the questionnaire.

<sup>&</sup>lt;sup>1</sup>Asian Civilisations Museum, Singapore <sup>2</sup>Singapore Polytechnic, Singapore

**Findings** - The finding showed that information literacy level of the samples is lower than average; there is significant different between the basic and factual information literacy levels. Formal and informal education programs of the PNU had influenced on increasing information literacy level of the students who attended classes.

**Results** - Any academic year in the university increased information literacy level of students to 3 scores of the total score of the questionnaire.

**Practical implications** - Dissemination of the results may also prompt more widespread acceptance of the role of information literacy in higher education.

**Originality/value** - This paper contributes to the base of information literacy, and assessing by using the ACRL Standards. Although other information literacy rubrics exist, there is a shortage of publications that report the results of their application to student academic work.

**Keywords:** Information literacy, Assessment, Law students, Higher education, Payame Noor University (PNU). Ashtian Branch

## Swaziland National Library in the Digital Era: Problems and Prospects

#### Dr. Thiyam Satyabati<sup>1</sup>, Nkosinathi Dlamini<sup>1</sup> and Maltesh Motebennur<sup>2</sup>

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Abstract: The Swaziland National Library Service (SNLS), like most national library services in the global south serves a dual purpose, mainly the National Depository library and Public library systems. SNLS operates two main public libraries in the major towns of the country (Mbabane and Manzini) and thirteen branch libraries located in the smaller towns. The SNLS was initially established for recreational purposes rather than to perform the functions of a National Library. This paper outlines the acquisition of electronic resources describes the background and the rationale in the formation of strategy. It also discussed the issues and procedures that are to be followed collaboratively towards the collection building of electronic resources to support the teaching and research of the country. The benefit of the strategy includes greater access to electronic resources by the community throughout the country. It also looks at the challenges facing the library's collection development practices especially in relation to falling budgets, proliferation of electronic materials.

**Keywords:** Collection development policy, Collection development, Collection evaluation, Collection maintenance, Collection preservation, Book budgets, Swaziland, Southern Africa, National library

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#### SWOT Analysis of Emerging Technology: The Case of Ebooks

### Lisa Peet, Dan Nishimoto, Josephine Evans, Jessica Harwood, and Irene Lopatovska, Pratt Institute

Abstract: In keeping up with the growing number of information technology innovations, information professionals face the challenge of navigating and making sense of a vast amount of information. One of the tools that can help evaluate new technology is SWOT (Strengths, Weaknesses, Opportunities, and Threats). SWOT is a strategic planning technique for evaluating a product, service, project, or organization, and is widely used in business and academia to identify areas of strategic development. An example of SWOT application for the analysis of information technology can be found in Joe Fernandez's (2009) report of social media use in libraries. This article will aim to 1) understand the key characteristics of academic e-book using the SWOT framework; and 2) outline strengths and weakness of this framework for assessing information technology in general. The article will illustrate that application of the SWOT technique for understanding emerging technology enables structuring of the vast amounts of information about this technology into cohesive and actionable clusters. Within the SWOT framework, the Strengths and Weaknesses clusters summarize information pertaining to the technology itself, while the Opportunities and Threats clusters link technology to the broader socio-economic context. In the reviewed e-book example, the SWOT helps to identify the embedded features of e-book technology that make it desirable or undesirable for academic libraries and their users; it also outlines external factors (reading culture, legal and business realities) affecting the current and future uses of this technology. Such structured, summative review of emerging technology provides a useful tool for instruction (e.g., for gaining familiarity with the new tools) and decision making (e.g. collection development decisions). The framework can be applied for evaluating various component of the emerging technology, from the analysis of technology and its functionality to the broader practices and communities around it.

The use of SWOT does not require extensive training and can be done within a short timeframe. The limitations of SWOT include a) inability to identify the significance of one item over the other (e.g., is accessibility a more "important" e-book feature than usability?); b) subjectivity of the information selection process that reflects participants' biases; c) requirement for keeping information updated in order to maximize its validity and accuracy for decision making. Despite these limitations, SWOT offers a viable technique for evaluating and understanding emerging information technologies and can be applied in various contexts.

Keywords: SWOT, Strategic planning, Technology adoption, Information use, Reading practices, Academic libraries

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### Technicality, Humanity and Spirituality --- 3-level Multidimensional Proactive Services toward Lifelong Learning Lidu Gong

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**Abstract:** This qualitative research explores 'full service', i.e. 3-level multi-dimensional approaches to library services: technicality, humanity and spirituality. The axiologyontology-epistemology underpinning this exploration is that a problem can't be solved at the same level of thinking (Einstein). This theme is particularly important when elearning is looming large in people's lives. Experiences show that where there are information enquiries, there are technical keys behind; beneath most of technical problems, humanistic elements come to the fore for solutions; and when life crisis become entangled with social issues, only spiritual force can untie the knot. This new approach is supported by the statistics that 50% of customers don't come back to their libraries due to the negative attitude from the librarians, and 70% are uncertain about their needs. Three metaphors are used to illustrate the proposed changes of service mode - fishing over fish; people over items; and heart over head - in response to the 3-level services respectively. At technical level, service mode changes from reactive towards proactive, from transactional towards interactive, from verbally instructive towards tactile/kinaesthetic, and from information acquisition towards skill training. When interactions come to humanistic level, changes swop from responsive towards facilitative, from cognitive towards affective, from informative towards transformative, from 'impartially' data-geared towards personalised client-centred, and from 'closureoriented' towards 'step-stone-seeking'. At spiritual level, changes need to switch from one-off towards follow-up, from dismissive towards reflective, and from duty-bound towards passion-driven. Technicality gives customers competence; humanity creates confidence; and spirituality fosters transcendence. All contribute to forming lifelong learning mechanism. Technical approach is geared toward solving learning problems; humanistic pedagogy toward solving social problems; and spiritual service towards solving life problems. Customers are expected to undergo the whole cycle of information processing: turning data into information, transforming information into knowledge, and further transcending knowledge into wisdom and personality. Librarians need to scaffold patrons' learning mode from accumulative towards creative, from extrinsically-motivated towards intrinsically driven. Information needs draw customers to the library, technicality keeps them here; humanity attracts them back, and spirituality uplifts them to a new level of living. Librarians are educators and transformers.

A librarian's quality is the library-users' quality. Only the transformed can transform; the inspired inspire; wisdom teaches wisdom. We don't need to be fully-equipped to provide full service because real education is self-educating and sincere service is self-serving. The server and the served grow together. The goal is: whoever comes to the library goes out as a different person. The assumption is: what's held in the heart is better than that in the mind, and what's held in the mind is better than that in the library. The logo is: open our heart before opening our mouth; broaden our mind before reaching out our hands. The pathway is: every routine encounter is a unique entry-point to deeper level communication that facilitates transformation; and every ordinary interaction is an extraordinary transcending opportunity to a higher level of learning and living for both the customer and the librarian.

**Keywords:** Proactive, Multi-level and multi-dimensional services, Lifelong learning, Technicality, Humanity, Spirituality

### Technological Basis for Information Science in Brazil: A Scientometric Study

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Abstract: The technological component has been constantly invoked to justify numerous changes in various areas of knowledge. In Library and Information Science (LIS), technological themes are increasingly visible composing their research agenda. The current study aims to investigate the scientific research on the technological theme and thus understand the basis of its support. It aims to outline the profile of scientific literature on technology in LIS through a descriptive and quantitative research based on scientometric studies of scientific communication. Statistical methods for the collection and structuring of data were used. The source of the research was the Referential Database of Information Science Periodical Articles (Brapci), with researches conducted in November 2012 using the terms 'computer', 'automation', 'information systems', 'technology', 'electronic', 'e', 'digital' and 'virtual' gathered to analyze the technological base area of 353 articles. The qualitative part of the analysis and interpretation of data involves domain analysis. The theoretical framework was built from a base of technological knowledge accumulated on the Annual Review of Information Science and Technology (ARIST) for the past 50 years, in which systematization was instrumental in the selection and analysis of national scientific production. The items were distributed by date of publication, scientific journals, authorship and co-occurrence of terms. For domain analysis, a thematic clustering was conformed. Results indicated that the articles were published between 1972 and 2008, outlining the year of 2001 with the largest quantity (29) and a decreasing setting in the last decade. The journal with the highest number of publications is the Information Science periodical (166). 82% of the authors have up to 2 published articles on technology, indicating that the subject has no homogeneous group work nor research continuity and the most recurrent terms are "information" and "systems" and "technology". 7 thematic domain groups that constitute the technological basis of the field were identified: the most representative of them is led by 'information systems', followed by 'digital and virtual library'; policy issues involving 'internet and network'; 'computer teaching librarianship'; 'automatic indexing', 'knowledge management, and electronic publishing.

**Keywords:** Information and Communication Technology, Technological basis, Library and Information Science, Scientometrics, Scientific communication

### Technological Innovations in Nigerian Libraries: The Challenge for School Libraries

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**Abstract:** E-Commerce and Virtual library has become the order of the day globally. Looking at the cost of acquisition, installations and maintenance of technological equipment in libraries, an overview of school library was made. This paper examined how clientele at this level of education, primary and secondary, can meet up with this important tool if they want to remain relevant in meeting with the present day education requirement and development. This paper therefore exploits areas which library clientele at this level of education will not be deprived of the use of technology in our libraries today. It further highlighted the predicaments of school libraries in Nigeria, at present, vis-à-vis the advent of technological innovations in libraries and then proffer solutions.

## A Theory of Digital Library Metadata: The Emergence of Enriching and Filtering

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Abstract: The ever increasing volume and diversity of information objects, technological advances and rising user expectations is causing libraries to face challenges in adequately describing information objects so as to improve the findability and discoverability of these objects by potential end users. Taking these present metadata challenges into account, this thesis inductively explores and develops overarching concepts and principles that are pertinent within both current standards-based and emerging metadata approaches. Adopting a Constructivist Grounded Theory Method, this thesis conducted in-depth interviews with 57 purposefully selected participants, comprised of practising librarians, researchers, metadata consultants and library users. The interview data was analysed using three stages of iterative data analysis: open coding, focused coding and theoretical coding. The analysis resulted in the emergence of four Core Categories, namely, metadata Enriching, Linking, Openness and Filtering. Further integration of the Core Categories resulted in the emergence of a theory of digital library metadata; The Theory of Metadata Enriching and Filtering. The theory stipulates that metadata that has been enriched, by melding standards-based (a priori) and sociallyconstructed (post-hoc) metadata cannot be optimally utilised unless the resulting metadata is contextually and semantically linked to both internal and external information sources. Moreover, in order to exploit the full benefits of such linking, metadata must be made openly accessible, where it can be shared, re-used, mixed and matched, thus reducing metadata duplication. Ultimately, metadata that has been enriched (by linking and being made openly accessible) should be filtered for each user, via a flexible, personalised, and re-configurable interface. The theory provides a holistic framework demonstrating the interdependence between expert curated and sociallyconstructed metadata, wherein the former helps to structure the latter, whilst the latter provides diversity to the former. This theory also suggests a conceptual shift from the current metadata principle of sufficiency and necessity, which has resulted in metadata simplicity, to the principle of metadata enriching where information objects are described using a multiplicity of users' perspectives (interpretations). Central to this theory is the consideration of users as pro-active metadata creators rather than mere consumers, whilst librarians are creators of a priori metadata and experts at providing structure, granularity, and interoperability to post-hoc metadata. The theory elegantly delineates metadata functions into two: enriching (metadata content) and filtering (interface). By providing underlying principles, this theory should enable standards-agencies, librarians, and systems developers to better address the changing needs of users as well as to adapt themselves to recent technological advances.

**Keywords:** Libraries, Metadata, Metadata Enriching, Metadata Linking, Metadata Openness, Metadata Filtering, Cataloguing, Digital Libraries, Web 2.0, Semantic Web, OPAC, Socially Constructed Metadata, Standards-Based Metadata, Constructivist Grounded Theory Method

### Theory Sense in LIS Scholarly Literatures: Observation of Taiwan Case

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Abstract: Theory is seen as core element of a discipline, which could summarize existing knowledge, predict the unobserved events and relations. (Connaway and Powell, 2010, p. 49) Although LIS is a discipline started from practitioner sector, it has been emphasized to introduce or construct theories into LIS practitioner works and researches since LIS professionals tried to establish LIS as a discipline. The professionals construct practice and researches on theories and theoretical discussion and debates are also built in practice and research process. The way theories are introduced in scholar works are through citations in contents. Citations have been taken as tokens to show the links between citing and cited literatures and the results are transformed to presentations of impact. Part of researchers think not only take citations as presentations for linkage among scholarly works, it is also important to reveal what kind of theoretical discussions were carried out when scholars applied the theory in their scholarship. Both quantitative and qualitative approaches have been taken to exam use of theory in research process, including capturing use of theory in LIS by numeric ways (Kim & Jeong, 2006; Pettigrew & McKechnie, 2001) or observed the use of sample theory in LIS researches (Hider & Pymm, 2008; McKechine & Pettigrew, 2002), further examining and analyzing how theory is discussed and used in LIS scholarly literatures in a qualitative manner is limited. In this study the authors review articles issued in the top four LIS scholarly journals published in Taiwan, Journal of Library and Information Science Research, Journal of Library and Information Studies, Journal of Library & Information Science and Journal of Educational Media & Library Sciences, during the period from 1990 to 2013 to reveal the use of theory in LIS researches over the last 24 years. The authors take citation analysis and content analysis approaches within Introduction, Methods, Results, and Discussion (IMRAD) structure to develop a complete explanation of the phenomenon of applying theory in LIS research. Random samples selected from each issue of four top Taiwanese LIS titles will be included in this study, and types of publications, research topics, methods used, and theories applied, cited theory sense and citing works-cited theories linkage will be enclosed in this work.

Keywords: Theory Analysis, LIS Research

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## Thinking Skills to Support Innovation: Challenges for the Modern Day Library Leader

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**Abstract:** Quantitative and qualitative studies have been conducted on an array of library science students and professional librarians to determine their thinking style preferences. The data collected represents information from first and second year library students, students enrolled for a master's degree in Information Technology (specifically aimed at librarians), as well as information from qualified librarians operating on a middle management level that attended short courses on library leadership.

This information can be used to give direction on what the focus needs to be for developing library leaders for the 21rst century.

From all the data collected on all the levels, the conclusion is that the natural thinking style preference of all participants is for structure, processes, procedure and detail. The data also reveals a lesser preference for futuristic and innovative thinking.

Although innovative thinking skills can be developed, an individual that is unaware of his/her preferred thinking styles are reluctant to use thinking styles of lesser preference.

If libraries are to remain the leading resource of knowledge and stay ahead in the 21rst century, innovative thinking needs to be embraced on a daily basis. By using Drotter's leadership pipeline, and the Whole Brain® model of Herrmann, we developed a mental model to facilitate the necessary change in thinking styles by means of training and mentoring.

In the presentation we will compare and analyse the data of our quantitative and qualitative studies and discuss the mental model in detail. Suggestions on how to implement the model will also be presented.

## Training the Trainers: The New Form of Training in Iran University Libraries

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**Abstract:** In the era of information explosion, the nature of library and information services makes library staff update their work knowledge and skills regularly. It helps library employees to acquire more skills through continuous learning. The demand for online training by university library staff has increased significantly as has the number of online courses available. Although the general belief is that these online training programs benefit staff and university libraries, the reality is that very little is known about the outcomes of online training or what constitutes effective online training implementation practices.

The study took place in an online environment. The research activities covered a thirty-day period from February 4 to March 5, 2012. Through the Iranian universities both medical and non-medical, the NIC (Information Services & Technology) institute Online Training department provided courses on training how to use different database and increase librarian skills as a trainer in minding scientific paper

The paper provides an overview of a strategy to increase utilization of online databases by librarian (trainers). 44 online training sessions both medical and non medical were held. 633 number of 881 registered librarian members participated in the online training sessions. Overall participant rating of satisfaction with the training and achievement of learning objectives was high. Majority of training participants (56/52%) indicated that they were very likely to use online database to search their own literature and train to their library end users. flexible (allows more people from one worksite to Participate), saves time, eliminates travel cost, generally lower training costs, and ease of access were the main reasons to use online training for librarian.

### Trends in Focus Group Research Methodology: Potential Applications for Library an Information Science Researchers and Practitioners

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**Abstract:** This abstract concentrates on a number of developments that have risen to the forefront since the turn of the Twenty-First Century. Foremost among these is the online focus group, which is compared and contrasted to the conventional face-to-face format with respect to opportunities and challenges, and process and outcome measures. The impact of geographical dispersion and the lack of nonverbal communication are

explored. Also receiving increased attention is the use of mixed (qualitative and quantitative) and multimixed data collection approaches in a single study. Among other advantages, this practice is valuable for the triangulation of study data. Developments are also occurring in the analytic component. There is now recognition of the need to incorporate group context and interaction in comprehending and analyzing the data. Discourse and conversational analysis have assumed a role among the previously neglected voices of "special" or "vulnerable" populations—children, the elderly, specific ethnic and racial groups, and people with cognitive and emotional impairments. To stimulate the production of talk and, especially, group interaction, researchers are now incorporating a number of ethnographic oriented, data-elicitation techniques into focus groups. Discussed are picture drawing, storytelling, roleplaying, and vignettes (as presented in detail by Walden at QQML 2013). Lastly the literature reflects increased attention to the ethical issues such as informed consent and confidentiality encountered in each step of the focus group research process.

## Triggers and Barriers of Collaborative Information Behavior (CIB) among Physicians: A Qualitative Study

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Abstract: Collaborative information behavior (CIB) is strongly affected by contextual factors and in different contexts we can see various aspects of collaborative information behavior. In this study, we investigate the triggers and barriers of collaborative information behavior in an educational-medical context in Iran. This qualitative research uses grounded theory as research method. Semi-structured interviews were conducted with twenty physicians (in Fellowship and Residency stages) in Shahid Beheshti University of Medical Science. The results indicated that five main factors cause collaborative information behavior, including lack of domain expertise, lack of time, information scatter, complexity of information needs and lack of immediately accessible information. The barriers that hinder (CIB) in this context fell under five categories, technological, individual, team, educational structure and cultural barriers. Some of these triggers and barriers have identified in previous researches in different contexts.

Keywords: Collaborative information behavior, Triggers, Barriers, Iran, Physicians

Unintended Consequences: An Evaluation of the Goodness of Relationships Created in Commonly Used Thesauri and Implications for Information Retrieval

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Abstract: Since its initial release in 1994, the National Information Standards Organization's Guidelines for the Construction, Format, and Management of Monolingual Thesauri (ANSI/NISO Z39.19) have serve four purposes, specifically: (1) translation (provision of means for translating the natural language of authors, indexers, and users into a controlled vocabulary for indexing and retrieval; (2) consistency (promotion of consistency in the assignment of index terms; (3) the recognition and construction of semantic relationships among terms; and (4) retrieval (to support searching in the retrieval of documents) [1]. The professional literature is rich with advice and guidance on the proper construction of thesaurus for use in indexing and retrieval [2, 3, 4, 5, 6, 7]. This research focuses on the role that thesauri play in construction of relationships (purpose 3) and its support for retrieval. In 2013, many search engines support the capability to integrate thesaurus terms and relationships to assist in retrieval. In most search engines, thesaurus terms and their relationships are used for query expansion. The end users search terms are checked against the embedded thesaurus for matching terms. When a matching term is found, the user's query is expanded to include synonyms, broader, narrower or related terms. Most search engines allow an organization to define how the relationships are configured and interpreted at the time of search. For example, if a compound term is entered, the search system may be configured to match the compound concept and/or the individual terms. Most search engines also support the definition of expansion rules to include other terms that are somehow related to the search term. For example, synonyms may be rated as 100% equivalents and so are added to the query as equally weighted search terms. Broader terms may be included only when no or few hits are retrieved. Narrower terms may be included in the expanded query, but are weighted at a lower weight to ensure that they appear at a lower relevancy rate in the search results. Terms that are otherwise associated with the search terms may also be included in the query are relevancy rated still lower, e.g. 35%.

When a thesaurus is embedded in a search engine to enhance retrieval, the goodness of the definition of relationships is critical. Search system configuration presumes that relationships will be defined in close adherence to the ANSI/NISO Z39.19 guidelines. When thesaurus relationships are not defined in close adherence, and the thesaurus is embedded in the search engine, there may be unintended consequences. This research reports on (1) the unintended consequences of poorly defined relationships; and (2) the goodness of relationships defined in some commonly used thesauri. To understand the unintended consequences, sample queries are formulated and tested in selected search systems. Thesaurus relationships are evaluated through the automated translation of relationships into common English phrases. The commonly translated phrases are read and interpreted by the researchers to judge the goodness of adherence to the ANSI/NISO Z39.19 guidelines. Thesauri evaluated include Library of Congress Subject Headings, the Defense Technical Information Center Thesaurus, ERIC Thesaurus, UNESCO IBE Thesaurus, the Transportation Research Thesaurus, Thesaurus of Sociological Indexing Terms, and the GEMET (General Multilingual Environmental) Thesaurus. The research results suggest a new automated approach for evaluating and correcting relationships before embedding the thesaurus in a search system.

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## The Underlying Learning Management System and the Effect on Student Communication Patterns

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Abstract: The rapidly changing requirements in the educational curriculum of school of library and information science resulting from the exponential expansion of computer-based technologies naturally result in a reexamination of the knowledge and skills that need to be acquired by the next wave of library and information professionals. Skills in the use of new technologies are not only important in professional work but in the education process itself as more and more LIS courses are being offered via web with faculty and students utilizing learning management systems (LMS). This research will look at the communication differences between students in Blackboard classes (traditional approach) and Canvas classes (social media approach). The researchers will make use of ATLAS, a discussion analysis tool, to analyze the content of the discussion board. To effectively use the course management software, the instructor must take into account the learning styles and preferences of the students without some of the hints that face-to-face instructors receive in a traditional classroom.

## The Understandings of the Role of a Public Library in Estonia Mai Põldaas

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**Abstract:** The results of the study about the understandings of the role of a public library in nowadays Estonia will be introduced.

There is the Law of Public Libraries in use in Estonia. Various national polices for broader fields like culture, information and education are formulated to follow. But there is no (public) library's policy, special vision or other statement formulated into what kind of a direction will public libraries develop. The society is changing and there are new challenges before libraries today – what is the Estonian response to these developments? Are public libraries useful for Estonian government in building a democratic society? To whom and for what purposes there are public libraries in nowadays Estonia? Do Estonian libraries support local governments to provide services for local communities? Do public libraries offer a cultural space of human interaction? Are public libraries prepared to support their community in a lifelong learning and be useful in a knowledge-based society? These are the main questions asked and problems addressed in this study.

Carring out the study, there qualitative research methods will be used. The case study is used as main research strategy. Elements of comparative research will be used as well. The documentary analysis of current Estonian policies (like the policies of culture, information and education) and various media materials will be carried out. Using discourse analysis the articles and interviews of ministers, politicians, library directors, writers and other opinion leaders will be analysed (years 2009-2013). The main statements, expectations and understandings will be gathered, analysed and synthesized. The results will show what are the directions of public library developments in Estonia; how is the library's role seen and understood by those who make decisions or have impact on decision making. Perhaps there is a "hidden" policy for a public library possible to formulate and write out? The proposals for further developments, both for libraries and research will be made. Where possible, the results will be compared to other countries statements and plans.

**Keywords:** Public library's role in the society, Public library's policy, Challenges before libraries today

## Usability and Importance of Auxiliary Features available in IR Interfaces of E-journal Database Systems:

### A Users' Perspective

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**Abstract:** The aim of the study is to examine the auxiliary features (e.g. Alert features, Search History, Personalization, search plug-in, translation features, third party search facility etc) available in IR interfaces of e-journal database systems available in the field of Social Science disciplines. The study is purely based on survey method and tries to analyse the importance of auxiliary features on the retrieval process of users. Keeping users perspective in mind, only those respondents were selected who were doing research on the various subjects of Social Science disciplines in three target central universities of Delhi (University of Delhi, Jawaharlal Nehru University, and Jamia Milia Islamia University), India.

For measuring the importance of auxiliary features on the retrieval process of users, total 396 questionnaires were distributed among the respondents and out of all, total 305 responses were used for the study. The findings of the study reveal that most of the

respondents were not using auxiliary features very frequently in their retrieval process though a maximum of respondents gave their reasons for not using these auxiliary features for their retrieval process, due to lack of awareness, no user training, and no proper visibility of those auxiliary features in IR interfaces leads to decrease the usability of auxiliary features in a retrieval process of information. Despite of all, few auxiliary features were used by the respondents during their retrieval process i.e. search history, use of Index, search term highlighter, suggested subject headings, and Automatic translation and users shows their perceived importance in the retrieval process of information and collection more authentic and related information. The study suggests ideas to the IR (Information Retrieval) interface designer, how making their interface more interactive and easy to use by both, novice and experienced users.

**Keywords:** IR interfaces, Auxiliary Features, E-journal database systems, Information Retrieval, User Study

## Usability Testing to Improve Research Data Services Rachel Volentine<sup>1</sup>, Amber Owens<sup>1</sup>, Carol Tenopir<sup>1</sup> and Mike Frame<sup>2</sup>

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Abstract: Usability refers to the ease and accessibility of a system. Usability testing seeks to study how users interact with a system in order to improve the users' experience and satisfaction in achieving their objectives with the system. Usability testing is an important metric for improving a library's online services, including research data services. Libraries can help make research data available by providing repositories and data curation services for researchers to house their collected data. Providing services throughout the science data life cycle (i.e. plan, collect, share, and preserve) is important for producing higher quality research, expanding its impact, and data reuse. The Data Observation Network for Earth (DataONE) is supported by the US National Science Foundation and seeks to provide the framework and cyber-infrastructure to meet the needs of the science community to provide constant and secure access to Earth observational data.

The DataONE network has heavily invested and implemented a comprehensive Usability Program to ensure user-centric software and components are made available to the variety of DataONE stakeholders. DataONE's ONEMercury is a search tool for scientific data, and the ONEDrive is a mounted workspace on the user's computer that works with ONEMercury. In 2012, a usability test was performed of the DataONE's ONEMercury tool to evaluate how scientists engage with its content and information. Twenty-six participants performed a series of tasks using the tool. MORAE software recorded the sessions, including screen display, keystrokes, and mouse movements. Participants were also asked to think aloud as they completed the tasks. The results were analyzed by observation, think aloud, time on task, and number of errors. Another usability test was performed of the DataONE's ONEDrive to assess user impressions as the tool was in development. Six participants were shown a wireframe of the tool and asked for their feedback. This paper proposes to examine the results from the ONEMercury and ONEDrive tests and draw implications for libraries and other data providers wishing to implement and utilize usability practices and principles.

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#### Use of and Attitudes about the Library from Afar: Distance Students and Instructors

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Abstract: The social sciences library at a large public university library serves the needs of multiple colleges, schools, and departments on campus. At this university, the education, social work, and library and information science departments support independent distance education programs that are tailored to benefit both the faculty and students in the specific field. Using university statistics, information from the department websites, and departmental annual reports, background information about the distance education programs was obtained. Analysis of the relationship between the library and distance education programs was based on surveys of faculty and students that sought to determine how they use library services and resources and how librarians can better meet their needs. The faculty survey included questions about using library resources to prepare class material, requesting library instruction sessions, and recommending library services to their students. In addition, faculty were asked how the library could better support distance education courses. The student survey included similar questions to the faculty survey; however, it also asked the students about the library tools and resources they use most often, if they had visited the university campus and library during their tenure as a distance education student, and the types of library services that could be most helpful for class assignments and research. For a library perspective, current and former library liaisons to these departments were interviewed to assess their view of library services to the distant education programs. The surveys and interviews demonstrated that distance education programs in three distinct departments, all served by one library, require a variety of services, have different research needs, and make use of the library in different ways. This is significant in that libraries need to understand the variance in distance education needs across disciplines.

#### The Use of Electronic Journals by Teachers/researchers of Engineering and Social Sciences

#### Diana Machado, Alberto Fernandes, Fernanda Ribeiro and Fernanda Martins

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**Abstract:** Universities are environments where scientific communication is essential and where electronic format of journals is becoming more and more frequently used. Thus, the need arose for a comprehensive study on how much academics rely on the electronic format. By conducting a survey on teachers/researchers of the Faculties of Engineering and of Arts from the University of Porto, a set of comparisons were established which allowed a better understanding of the existing differences among the users of electronic journals in Engineering and Social Sciences. Generally, results indicate an extensive use of the electronic format, regardless the faculty. However, some differences emerge when it comes to details. Such is the case of the usage rate of reference management software which is considerably more used by Engineering academics than Social Science ones. **Keywords:** Bibliometrics, Electronic journals, Information behavior, Scientific Communication

## The Use of Information Sources for User Education Alzbeta Martinicka

Librarian, Slovakia

Abstract: The Slovak National Library has already provided informational education for users within services for several years. Every workplace of the Slovak National Library's Service department has to deliver basic informational and consulting services whereby it helps users mainly during their first visit in the library. The user's education is provided by members of staff who have long-time experiences with work in libraries. The Slovak National Library has regularly prepared trainings and workshops which are called "Informational Day" and "Informational Education". Librarians have got great interest to teach users how to search in library's catalogue, how to choose appropriate source (database), how to find required information, how to select results and how to borrow or reserve documents. These activities allow remaining an informational literacy of users in library and maybe that is reason why the number of registered users is still growing and the number of searches in library sources are rising too.

Use of Internet by the Research Scholars and Faculty Members of Baba Saheb Bhim Raw Ambedkar Bihar University, Muzaffarpur

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Abstract: The mission of a library is to acquire and systematically organise all documents that are received in the library and make them readily available for the use of teaching, research or any other purpose of users through internet is easily, time saving and at a time various users can access at a time. The goal of the library is to maximise the use of available documents and provide easy access to information to serve its users effectively and efficiently through the internet. The efficiency of library use depends largely on internet services of the library. Internet services in the libraries lay the foundation and determine the quality and efficiency of the services to users. Internet Services, which may be called services behind the scene, often remain unknown to the user is an expensive and an important part of library functioning. How expensive these internet services are, remained an important and curious subject of investigation among researchers in the field of library and Information Science right since the time, this subject started growing to the present. Researcher has designed a questionnaire will distributed to the research scholars and faculty members. This article will mainly focus to the awareness and feed back about the satisfaction level of users.

**Keywords:** Use, Internet, Research Scholars, Faculty members, Bihar University, Muzaffarpur

## Use of Public Relations and Publicity (PRP) by the Public Libraries in Lahore, Pakistan

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**Abstract:** Lahore is the historical city of Pakistan and capital of the largest populous province, i.e., Punjab. It is also called city of libraries having some important, historical and large libraries. The literature on services and libraries' marketing establishes that public relations and publicity are important for the libraries in the present competitive, digital era. It helps in getting the required resources by the parent bodies, creating goodwill and making public use their resources and services. Various studies have established that library services are not fully exploited by their communities because of being just not aware of the services offered.

Public libraries in the developed world have started making extensive use of public relations and publicity for meeting their objectives.

The proposed study aims to explore the use of public relations and publicity by the public libraries of Lahore. The study will bring into light the present status while creating awareness among the professionals and giving guidelines for the effective strategies in the local environment.

#### Method:

In absence of any previous research on this topic, it will be an exploratory study based on qualitative design of study. Interview technique will be used to collect data to address research questions.

#### Research Questions

1. What is the perception of chief librarians regarding PRP?

- 2. What kind of PRB activities are in/not in practice by the public libraries?
- 3. What are the barriers in using these practices?
- 4. What kind of PRP strategies can Pakistani libraries use?

### Users Awareness, Perceptions and Utilization of Makerere University Main and Selected Branch Libraries

Lydia Namugera, Makerere University Library

Abstract: Demonstrating values for university stakeholders has become an increasingly important activity in academic libraries around the world. The concept of library services and values can be defined as value for users in the level of support and services provided; value for the parent institution in contribution to institutional missions and goals; or economic value for return on investment. The purpose of this study was to investigate awareness, perceptions and usage of Makerere University Library Services in the Main Library and two selected Branch Libraries so as to determine whether users are fully aware of the various services, as well as their perceptions and actual usage of these services. The study adopted a qualitative approach using descriptive statistics to capture the library users' views about library services with particular references to users' awareness, perceptions, and usage of library services, and the data were collected and triangulated via a series of interviews. The findings from the study showed that major category of library users are undergraduate students; that more users visit the Main Library compared to the other two branch libraries; highlights a poor rating of awareness of a significant number of library services, yet usage of library and information services has a direct linkage to awareness of users about those services; showed a good rating of the quality of services provided by MakLib; as well as a good rating of the quality of services that are provided by MakLib staff. To address some of the issues raised by the findings, this study recommended promotion and marketing of library services using diverse approaches in order to enhance users' awareness and increase usage of all library services; continuous improvement of the end-user training programme needs to be engaged; ensuring that there are sufficient networked computers with fast Internet connectivity in the Libraries; funding should be increased to MakLib to enable establishment of appropriate IT infrastructure; and finally, subscription to online electronic resources should be increased to address increasing demands

# Users' Perception about the Pakistan Research Repository (PRR)

#### Muhammad Safdar<sup>1</sup> and Shafiq Ur Rehman<sup>2</sup>

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**Abstract:** The review of literature revealed that institutional repositories are in initial stages in developing countries and few initiatives have been taken place in the context of institutional repositories in developing countries. The Higher Education Commission (HEC) of Pakistan initiated a national level project Pakistan Research Repository (PRR)(http://www.eprints.hec.gov.pk/)to maintain a repository of all the PhD theses produced by the intellectuals of Pakistani universities. At present, digitized full – text PhD theses produced by research scholars of Pakistan are freely accessible through PRR. No study has been taken to know about awareness, use, problems, and satisfaction of users with PRR

The purpose of this study is to know the users' perception, awareness, problems, and satisfaction with PRR. To meet the purpose, study was conducted in multiple phases. In the first phase, literature review has been done and on the bases of reviewed literature, a web based questionnaire was developed. Currently we are collecting the data via online survey from 500 users (LIS professionals& library users of Pakistan) of PRR. The current study is first one in Pakistan of its type in terms of topic as no study has been conducted yet on this national program i.e. PRR. The findings of the study will be helpful for HEC to enhance awareness, marketing, increase satisfaction level of users.

**Keywords:** Repository, Digital libraries, Open access, HEC resources, E-resources, ICT, Electronic resources

### Using Collaborative Teaching to Help 5th Grade Students Develop Information Literacy Skills

Yuangling Lai

Taiwan

**Abstract:** To cope with the technology trend and equip students with necessary abilities in the era of technology, the American Association of School Librarians (AASL) issued the "Standards for the 21st-Century Learner" in 2009, in which the main concerns are ability to learn and innovate, ability to manage life and career, and ability to cope with media and technology. In Taiwan, the field of social studies not only encompasses topics which are important in the 21st century such as the earth, history, policies, and economy but also stresses cultivation of abilities such as critical thinking, value judgment, research and communication, problem solving which are valued in the "Standards for the 21st-Century Learner". Therefore, this study aims to explore how social studies teacher and teacher librarian collaborative the unit "Taiwan in Japanese Colonial Period" based on the Big6 Model. The teaching project lasted for 3 weeks, 12 course hours in total. The research data was gathered through participant observation, questionnaire, and document analysis. The results indicate that social studies teachers and teacher librarians could follow the four stages: "direct instruction", "demonstration and guided practice", "independent practice", and "reflection" to complete their teaching activity. However limited teaching hours, students' ineffectiveness in search for information with key words, too much informative content of the given unit, over intensive courses, practices of e-database and online resources made the whole teaching project prolonged from 9 course hour to 12 to complete the teaching. The students' self-evaluation of this project showed that what they learned most was webpage search and team working, that how well they engaged in learning and cooperated with other team members significantly influenced their learning outcomes. Therefore, it is suggested that project topic should be carefully selected, course hours should be prolonged, willingness to do teamwork should be enhance the ability to search information.

Keywords: Teacher Librarian, Social Studies, Teacher' Collaboration, Big6

# Using Content Analysis in LIS Research: Experiences with Coding Schemes Construction and Reliability Measures Chi-Shiou Lin<sup>1</sup> and Wei Jeng<sup>2</sup>

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Abstract: Originated in sociology and widely used in mass communication research (Riffe, Racy, & Fico, 2005; Zen, Ding, & Milojević, 2013), content analysis is now also popular in LIS research, e.g., analyzing messages conveyed in different types of information resources, professional discourses, citation functions in scholarly texts, to name a few. Content analysis is a flexible and unobtrusive method to analyze the meanings of narratives objectively. However, the objectivity of analysis relies heavily on a well-constructed coding scheme as well as the consistency of coding behavior. Coding schemes determine the validity of the analysis, while standardization and consistency of coding procedures safeguard the reliability of study results. Many factors can influence the research design decisions in undertaking a content analysis. For example, the research inquiry and the complexity of the studied objects (e.g., textual narratives, images, Web content, citations) significantly influence the construction of the coding scheme. The amount of data to be analyzed may influence how reliability will be established and measured (e.g., intercoder or intracoder reliability, single or multiple coders). While methodology literatures have offered general guidance on how to conduct content analysis, there are many conceptual and technical decisions to be made that can vary greatly depending on the research purposes and research contexts.

In this paper, we will share our experiences on how to build a sound and valid coding scheme and how to establish coding reliability. Specifically, we will discuss how research goals and theoretical perspectives shape the codes that signify the attributes and meanings of the analyzed objects as well as how research contexts influence the adoption of reliability measures. We will use our previous research as examples to highlight the rationales behind the decision. Those projects include two studies analyzing Web content (government Web sites and social references Q&A), one analyzing social sciences journal abstracts, and one analyzing citation contexts in social sciences and humanities journals. With the highly diverse research topics, studied objects (texts), and research purposes and contexts, we hope to caution future researchers with potential challenges and possible solutions in undertaking content analysis.

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# Using Economic Data to Demonstrate the Value of the Library Melissa Lamont

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Abstract: Libraries have always collected data, from the number of books to the number of visitors and reference questions to the amount spent on journal subscriptions. Now libraries are collecting data about the number of visitors to the library web site, the number of articles downloaded and the number of reference questions received via chat or e-mail. These statistics do not give a full accounting of the library's services or holdings, but they are easy to collect, understand and compare. In this time of budget constraints however, librarians increasingly need to prove that libraries are well worth the investment. Further, digital services have become essential and have become an increasingly larger share of the library's budget. To fully demonstrate the value of libraries and justify the cost, librarians should evaluate and communicate using economic measurements such as return-on-investment and cost-benefit analysis. Economic valuations are problematic for non-profit cultural and educational institutions such as libraries, as it is difficult to place a monetary value on a public good. This paper reviews economic valuation methods useful to librarians, with an emphasis on digital libraries, and highlights ways in which librarians have successfully implemented economic valuations.

**Keywords:** Library evaluation, Return on investment, Economics, Quantitative methods, Cost benefit analysis

### Using Phenomenography to Understand the Information Literacy Experiences of EFL (English as a Foreign Language) Students

#### Nicole Johnston

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Abstract: This paper explores how phenomenography was used to gain an understanding of how EFL (English as a Foreign Language) students' experience information literacy. This study found that EFL students experienced information literacy in four qualitatively different ways: process, quality, language and knowledge and had varying experiences of information and learning. This study used phenomenography, a relational approach to explore the information literacy experiences of EFL students. Information literacy was defined in this study using a relational approach that lends itself to more learner centred teaching approaches and explores experiences and perceptions of information literacy and how students 'use information to learn'. Phenomenography studies the qualitatively different ways a phenomenon is experienced in the world around us. Thirty, final year female undergraduate students from a higher education institution in the United Arab Emirates (UAE) were interviewed for this study. Phenomenography has traditionally been used in the education field to study the phenomena of learning and teaching, and also in key information literacy research that investigates people's experiences and perceptions of information.

Phenomenographic findings from this study showed that EFL students faced challenges that impacted on their experiences of information literacy. The study found that English language limitations impacted on EFL students' experiences of reading, accessing and translating information. EFL students faced barriers to accessing information in local contexts and in their own language. EFL students also faced challenges when reading text in English, when translating between two languages and with understanding the meaning and context of information in English. This research has revealed that EFL students applied various techniques when they read, understood, organised and translated information and has revealed that EFL students' experiences of learning were sequential, strategic and informative. This paper will explore aspects of phenomenography including conducting phenomenographic interviews with second language learners and how phenomenographic results such as categories of descriptions, dimension of variation and outcome spaces can be used to gain an understanding on how students experience and use information

**Keywords**: Phenomenography, Information literacy, EFL students

# Using TRA to Explore Use of LinkedIn among Library and Information Professionals in Nigeria

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**Abstract:** Professional networking is a way of interacting with colleagues in the same field so as to share common interest and update one another with the trends and development in the profession. With the emergence of internet technology, professional networking had become easier and faster than it used to be. One of the most popular professional networking tools is LinkedIn.

This paper used theory of reasoned action (TRA) to investigate the use of LinkedIn among library and information professionals in Nigeria. The study adopted survey with online questionnaire as instrument for data collection from 100 library and information professionals (LIPs). Hypothetically, relationship among attitude, subjective norms, intention to use and use were examined. The results revealed that both 'attitude' and 'subjective norm' had positive association with 'intention' however; 'attitude' had a stronger positive association than 'subjective norm'. In addition, the finding validated TRA model as it found that 'intention' had a very strong positive association on 'behaviour' that is, the use of LinkedIn.

**Keywords:** LinkedIn, Social Networking Sites, Library and Information Professionals, Theory of Reasoned Action (TRA), Attitude, Nigeria

# How Video Publication of Laboratory Experiments Will Save Science

Moshe Pritsker

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Abstract: Experimental sciences including biology, medicine, physics and chemistry chronically suffer from low reproducibility of published studies. Recent experiments indicate that 70% to 90% of studies published in scientific peer-reviewed journals are not reproducible. Even if partially true, these findings present difficult questions about the future of scientific research. We believe that this phenomenon is mostly due to the traditional text format of scientific journals, which cannot provide an adequate description of modern research techniques. This creates a critical problem of knowledge transfer that severely impacts research and education. Addressing this challenge, JoVE has developed a unique video-based approach to scientific publishing to provide systematic visualized publication of experimental studies. The first case studies conducted at a number of university labs in the USA indicate that video publication greatly facilitates understanding and learning of experiments, thereby enhancing productivity in research and education. This presentation will discuss the development of scientific video publication, its technical challenges, implications for scholarly communication, acceptance in the academic and library community, and first-hand accounts from users of this medium.

### A Virtual Library for Students with Asperger's Syndrome Maria Zervou, Anastasia Tsoubrakakou, Aggelos Papavlassopoulos

OTE SA, Greece

Abstract: Information services and cultural organizations are the threshold of knowledge and information diffusion. It is of high importance to ensure that information can be accessed by anyone regardless of any constraint or disability. In this case an effort is made to bring libraries closer to the children with Asperger's Syndrome. The research will focus on students aged from six to twelve years old with Asperger's Syndrome who are scientifically known to be of high functioning. The platform is currently installed in every student's private pc. The platform's interface consists primarily of the educational material, as it is provided by the Ministry of education, as well as by supplementary data. It is divided into sections according to each class, for example mathematics for a junior, b' junior etc which are further divided into sub-categories such as reading activity, listening activity. In each activity the student is redirected to the virtual library in order to find extra edutaining material that will help him complete each level and move on to the next. The idea behind this structure is to challenge the student to study progressively and visit regularly the virtual library so as to reach the last level where a rewarding and fun gaming adventure awaits. From our side the goal is, through the data collection, to measure how often the student uses the virtual library, note down his progress and with the feedback from the teacher and the parents to implement or alter the material in order to increase the frequency in which the student visits the virtual library. Due to the special characteristics that students with Asperger's Syndrome have, the platform of the virtual library must be designed in a way that fully meets the needs of those children without lacking in effectiveness. The main purpose is to gradually build in the consciousness of the student that visiting a virtual library is a creative and pleasant way to learn. The intention is to reach out to those who have limited access to information and in this research those in need are students with Asperger's Syndrome. This virtual library aims to help minimize the isolation from information and build ways in which informational fulfilment can be achieved.

Keywords: Virtual library, Asperger's Syndrome, Edutainment, Virtual environment

### Visualizing Intellectual Structure of Knowledge Management Subject Area: A Knowledge Domain Visualization View Rasoul Zavaraqi

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**Abstract:** Knowledge management is an evolving subject area which has affected different domains such as management, Information science, industrial engineering and other related domains. This field of science is the process of creating value from an organization's intangible assets.

Intangible assets, also referred to as intellectual capital, include human capital, structural capital, and customer or relationship capital. This subject area in the last 4 decades has developed and divided into different sub-domains which we name them specialties. Nevertheless there are fewer consensuses about its definition, origin, nature, and pioneers. Some experts have asserted that knowledge management discourse is affected by different paradigms based on different point of views toward knowledge and its management. However there is no evidence to this asserts. Thus the aim of the research is investigating the dominant paradigms of knowledge management theories and theorists. We use author co-citation analysis alongside social network analysis techniques to investigate the mentioned premise.

**Keywords:** Knowledge Management, Knowledge Domain Visualization, Co-citation Analysis

### They Want it All and They Want it Right Now: User Perceptions of the Research Library. A Focus Group Study of the URBS Network

### Giuseppina Vullo<sup>1</sup> and Paul G. Weston<sup>2</sup>

**Abstract:** This paper illustrates the current challenges research libraries are facing, such as budget cuts, marginalization of their role within the research workflow, and the

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changing nature of work behavior of the 21st century scholars, who focus more on just-in-time information retrieval, one stop shop services, and collaborative online environments.

After presenting a state-of-the-art of the changing behaviors of research library users, this paper describes the methodology and results of a focus group study of the URBS library 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.

Researcher perceptions of reliability and accessibility of the URBS network services are explored through focus groups. The results have helped the international library network to identify areas in need of improvement and qualitative aspects to be investigated further from the user perspective.

**Keywords:** Research libraries, Library networks, Focus group, Cooperation, Library evaluation, Library assessment, Bibliometrics

# Webometric Study of Top Ranked University Websites in the World

#### Prof. Dr. Ahmad Bakeri Abu Bakar and P. N J. Nur Leyni

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Abstract: With the introduction of the world wide web and graphical browsers in the 1990s the internet has become widely accessible and many people have grabbed the idea of using it for their multifarious purposes and agenda. They have established all types of websites to foster their mission and visions. All universities in the world have taken advantage of this phenomenon by having their own websites. It is envisaged that universities' websites partake in the success or failure of universities to market their programs to the world at large. Perceptions of scholars as to the quality of programmes offered by universities could be judged from university websites. Their judgment might be swayed by what are available in the websites. A party may be providing large amounts of information on its website, but if this information is difficult to find, its usefulness will be reduced. Likewise, a website may offer a high level of interactivity, but if a user cannot access the site it will count for little. The crux of the problems lies in the visibility and accessibility of those websites. What needs to be addressed is whether there are differences in terms of visibility and accessibility of the websites representing top ranked and low ranked universities in the world. As these web sites have been around for quite sometimes already it is therefore appropriate to question how effective they are. The objectives of this study are to determine whether there are differences in terms of visibility and accessibility of the top ranked and low ranked university websites. Thirty samples will be drawn each from the top ranked and low ranked university websites. The sampling frame for this study will be the Times Higher Education World University Rankings 2013-2014. A valid indicator of site visibility and online stature would be the volume of web traffic to a given site. Higher quality websites tend to attract more links. A software, Alexa will be used to study the visibility of the university websites. The number of in links, web traffic volume and the load time for opening the websites for the top ranked and low ranked university websites will be used as indicators of visibility.

The development of any web site has to comply with the existing accessibility guidelines. It is futile of having a website that is difficult to access by users because of its noncompliance with the existing standards on accessibility. To check for such irregularities the software *EvalAccess* 2.0 will be used. It is an online web accessibility evaluation tool that has been developed using web service technology. The findings from this study, could be used by those universities that are not highly visible and accessible to take the necessary steps to improve the development of their websites. Hopefully by taking these measures it would help the university in their drive to be the best among their contemporaries.

### Do Websites Support the Communication Mix? The Case of Selected Academic Libraries in Rio de Janeiro, Brazil

Barbara C. Vitiello<sup>1</sup>, Nino Carvalho<sup>2</sup>, Eduardo S. Spiller<sup>3</sup> and Frederico A. de Carvalho<sup>4</sup>

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**Abstract:** The wide prevalence of Information and Communication Technologies (ICTs) in everyone's daily experiences stimulates their presence in nearly any library around the world - not only as information gathering tools, but also as powerful management assets to be skilfully mastered and widely applied for users' benefit. This paper intends to evaluate the role of Websites, by far the key digital channel in any organization, in the communication activities as performed by a sample of libraries affiliated to a public university in Rio de Janeiro, Brazil.

Starting from the population of all 43 libraries listed in the university's library system, sample selection required only that the site be registered on the university's central information bureau and that it be active/online at the moment navigation begun. This procedure alone provided 28 library units valid for the research. Evaluation criteria to assess the communication mix in a website have been adapted from previous work (see Carvalho et al., 2010, and references therein) so that some 26 communication attributes and/or activities were finally retained.

The quantitative evaluation was mainly supported by descriptive statistics, and relies upon a customized spreadsheet with 28 rows (the libraries) and 26 columns (the eventually present communication elements as adapted from the literature). Data were collected throughout the second semester of 2013.

Even though websites do have widespread use among people in general, and much more so among information professionals, findings indicate that they are used in a much far less range and scope than expected in what the sampled libraries are concerned. The first six most present elements amount to some 40% incidence in the sample – information about collections; address and phone number; historical information; working hours; mix of services; databases and catalogue. The five less present elements amount to some 3% frequency – accessibility; videos; newsletter; online help; online surveys. Note that these last attributes relate essentially to interactivity benefits. When a simple, naïve effectiveness indicator – the ratio of actually present elements to maximum possible incidence – is computed for the sample, it amounts to less than 70%, surely a figure pointing to much needed improvement.

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The main recommendation points to a mostly desirable dialogue among librarians and website experts as to help establish the library's website as an effective, fully understood and adequately valued communication tool - both in terms of technological update as well as for the overall benefits of users and of service providers.

**Keywords:** Library services, Library communication, Communication mix, Webmarketing, Libraries- Brazil

# What's Out There? Job Opportunities for Graduates of LIS in the United States

Anna Ching-Yu Wong

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**Abstract:** Earlier studies, Van House (1985) and Wright (1988) had revealed that individuals entering the library labor market had increased and career opportunities for LIS graduates increased and started declining slightly in 1990. However, within the past decade, with rapidly changing technology, there have been fewer openings and decreased employment opportunities for LIS graduates. Many LIS graduates reported that they have accepted employment outside traditional libraries in the US (Weech & Konieczny, 2007, p. 67). According to the survey published in Library Journal (October 15, 2004), 10 percent of the LIS graduates landed a non-library setting position or a position not involving work in libraries. In 2007, it was reported that there was an increase in the percentage of LIS graduates who were employed outside the traditional library realm (Weech & Konieczny, 2007, p. 71). The steadily decreasing library job market was depicted as a "LIS workforce recession-proof" phenomena (Morgan & Morgan, 2009, p. 291; Marshall, Solomon & Rathbun-Grubb, 2009, p. 121).

The aim of this study is two-fold: to explore alternative careers for LIS graduates and to determine whether a MLS degree would be sufficient to land a professional librarian position. Using quantitative techniques, this study will examine the following issues: (1) What types of library positions are available for LIS graduates? (2) What proportion of the job announcements are for public and academic positions? (3) What alternative careers are available for LIS graduates? (4) Do the majority of library job openings require an ALA accredited master's degree? (5) What additional requirements (e.g. second master's or doctoral degree, computer skills, social networking, etc.) are advertised for requirements for a professional librarian position? (6) What particular areas within the field of library services are in need of a professional librarian? (7) What is the employment outlook for future LIS graduates?

Job postings found in the American Library Association (ALA), The Chronicle of Higher Education, and the Higher Education Jobs online resources covering from September 1 to December 31, 2013 are selected as the primary data sources for this study. The openings listed in these three selected resources are updated on a daily basis and are widely recognized and circulated among LIS graduates and professional librarians. Potential employers and universities are using these major sources to recruit LIS graduates. Positions not appearing in these three resources are not included in this study.

The purpose of this study is to shed light on career opportunities for future librarians, determining the potential job opportunities for LIS graduates and as well trends of the

current library labor market. It is hoped that the results of this study will also make a contribution to the literature in the field of library and information science.

**Keywords:** Library and information education, LIS job opportunities, LIS career patterns, LIS education, LIS workforce

### What is Different about E-books? A MINES for Libraries® Analysis of E-book Usage in Large Academic and Health Sciences Libraries

### Brinley Franklin<sup>1</sup> and Terry Plum<sup>2</sup>

**Abstract:** Building on the research agenda outlined in Franklin and Plum (2012) and the theoretical proposals of Guthrie (2012) concerning the transition from print to e-books in academic and health sciences libraries, this paper provides current data collected with the MINES for Libraries® (2013) methodology examining the following research questions:

- 1. Are e-books used for grant funded research, and, using a mixed-mode survey methodology (web and pen), do e-books and print books support funded research similarly?
- 2. What is the role of e-book usage in patient care in medical and health sciences libraries?
- 3. Are the users of e-books similar in demographics to the users of print books?
- 4. Will the adoption of e-books and the transition from print books to e-books follow the same trajectory as the transition from print journals to e-journals?

With new data from libraries not examined in the 2012 Franklin and Plum paper, convincing evidence will be provided to show that in libraries the transition path from print books to e-books will differ markedly from that of e-journals, and that e-books and print books are used in different ways by surprisingly different people.

**Keywords:** E-books, MINES for Libraries, Electronic resources, Academic libraries, Medical libraries, Health sciences libraries, Usage, Assessment

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### When Disaster Strikes: The Critical Importance of Effective Communication and Teamwork

#### Constantia Constantinou

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Abstract: The presentation "When Disaster Strikes: The Critical Importance of Effective Communication and Teamwork" describes the communication and recovery efforts of the Stony Brook University Libraries during a major flooding incident. The Health Science Library of Stony Brook University (SBU) supports the Schools of Medicine, Nursing, Dental Medicine, Health Technology and Management and the School of Social Welfare. In addition, SBU Health Science Library supports the University Hospital and its clinical staff. During a major flooding disaster, all Library personnel and operations were relocated, in order for collections, equipment had to be secured. Most of furniture and equipment were discarded and the facility infrastructure had to undergo major renovations. The presentation aims to emphasize the human factor and the importance of effective communication. Regardless of the physical, financial and operational consequences of the disaster in the library caused by major flooding, the effective team coordination and communication of information became the success of the unfortunate incident.

In response to the disaster, the library administration quickly mobilized the senior management team to prepare and issue information statements to the academic community. Utilizing, media, and electronic means of communication the library continued to provide updates and progress to the academic community at large. In addition, person-to-person communication such as scheduling town hall meetings became critical in addressing the concerns of the academic community. The implementation of all these measures enabled the library organization to successfully manage a situation of crisis. It has also become important that moving forward in order to minimize the risks, the injuries, and loss of assets that happen when such disasters occur, it is essential that the library organization needed to formalize a communication strategy for disaster management.

### Where to Start? Laying the Groundwork for Information Literacy at a Large Research University

Gabriela Castro Gessner<sup>1</sup>, Erin Eldermire<sup>2</sup>

**Abstract:** As colleges and universities are actively incorporating information literacy into the curriculum, many are turning to curriculum mapping. Curriculum mapping is a tool that educators can use to help ensure that students participate in an iterative, holistic program that builds new knowledge as students progress through a curriculum. At Cornell University, information literacy has been identified as a campus-wide learning

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outcome. To date, librarians and faculty at Cornell University have been approaching information literacy instruction in an ad-hoc fashion across many courses of study. Cornell University is a large research university with an undergraduate population topping 14,000 students, and which offers about 75 major fields of study within seven distinct colleges. In such a varied and dispersed academic environment, curriculum mapping seems almost out of reach. How can a relatively small corps of librarians begin to take on such a monumental task? Since our available resources cannot match the breadth and depth of instruction at Cornell, we elected to use a modified approach inspired by curriculum mapping. In this paper we outline our underlying strategy to laying a foundation for incorporating information literacy instruction on a major scale. The approach outlined here could be of interest to librarians, teachers and other educational planners at large institutions of higher learning.

# Why Qualitative Research in Library and Information Science?

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University of Tsukuba, Japan

**Abstract:** The aim of this paper is to provide insights into the use of qualitative research methods in the field of library and information science (LIS). According to J.D. Glazer (1992), the successful research is not measured by the formality of an approach but by its success in achieving its ends, i.e., to generate accurate and useful information. Possibly the most important contribution of qualitative research is that it gives practioners, students, and researchers alternative ways of approaching diverse and complex problems. In this 21st century where technology seems to be the key driving force of the economic and information sectors, there has been an significant increase of research studies carried out in almost every single field related to LIS - with the aim to better understand the underlying issues like IT system usage, interactivity between users and system interfaces, user satisfaction/needs, etc. - in order to provide better services and functions that could effectively satisfy the varying needs amongst our clients. Based on a review of selective research studies carried out between 2011 to 2013 on information-seeking behavior, such studies tended to depend solely on using the quantitative, rather than the qualitative methods for obtaining their research results. Since there is a lack of qualitative data to support their statistical findings, as well as to further reflection on the possible solutions, their results of such quantitative studies tended to be inconclusive and incomprehensive in terms of the way they review problems and how they find solutions. The aim of this paper is to provide insights into the use of qualitative methods in the field of library and information science (LIS) research. According to J.D. Glazer (1992), the successful research is not measured by the formality of an approach but by its success in achieving its ends, i.e., to generate accurate and useful information. Possibly the most important contribution of qualitative research is that it gives practioners, students, and researchers alternative ways of approaching diverse and complex problems. In the 21st century where technology seems to be the key driving force of the economic and information sectors, there has been a significant increase of research studies carried out in almost every single field related to LIS - with the aim to better understand the underlying issues, e.g., IT system usage, interactivity between users and system interfaces, user satisfactions and needs, etc. B- in order to provide better services and functions that could effectively satisfy the varying needs and expectations amongst the clients. Based on a review of

selective research studies carried out between 2011 to 2013 on information-seeking behavior, they tended to depend solely on using the quantitative for obtaining their research results. Since there is a lack of qualitative data to support their statistical findings, as well as to further reflect on the possible solutions, their results of such quantitative studies tended to be inconclusive and incomprehensive - in terms of the ways they reviewed problems and how they identified solutions for tackling the problems. Having recognized the above disadvantages, this paper aims at highlighting the importance of using of qualitative research methods in LIS research, as a way to complement the quantitative results. This paper features a series of interviews with a small group of LIS graduate students, and selective faculty members from the University of Hong Kong and the University of Tsukuba in Japan B- to obtain their opinions and experiences in applying various qualitative methods in LIS research. Various advantages, difficulties and challenges in applying the qualitative methods for conducting LIS research are also discussed in this paper.

Keywords: Qualitative Research Methods, Quantitative Research Methods

# Why Searching the Web is Difficult? Dania Bilal

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**Abstract:** Searching the web using search engines has become the norm for finding information in everyday life. In fact, based on the most recent report by comScore (2014), Google Sites lead the market share in "explicit core search" in the U.S. in December 2013 with 67.3 percent, followed by Microsoft Sites (with 18.2 percent) and Yahoo Sites (with 10.8 percent). The influence Google has made on the "culture of search" has been the subject of the book by Hillis, Petit, & Jarrett (2013).

While typing words or a phrase in an engine's Search box, or Search as You Type, or Type a Word and Go as many users believe, gives the impression of "simplicity" and "speed" in finding relevant information, many users spend hours searching to no avail. Researchers in varied fields of study have investigated the retrieval performance of search engines -from relevance ranking to readability of retrieved results- and suggested ways for improving the effectiveness of the engines. (See for example, Bilal, 2013; Bilal, 2012; Lewandowski, 2012; Benjamin, 2012; Collins-Thompson, et al., 2011; Levene, 2010). One may argue that the difficulty users experience in finding relevant information is attributed to inadequate mental models (Zhang, 2008). While in some cases this may be true, when it comes to graduate students in information sciences, who had acquired search and retrieval skills early in their educational program and who perceive themselves as "skilled" searchers, experience difficulty and emotional distress in finding relevant information, the design and capabilities of the search engines become questionable. A good body of research exists on undergraduate students' use of web search engines (see for example, Li, 2012); however, little research has investigated the cognitive and affective experiences of graduate students in information sciences in searching the web.

This paper reports on a study that analyzed the search and retrieval experiences of thirty five graduate students in information sciences over a three-year period. Findings from this study should contribute to our understanding of the core causes of difficulty and

negative affect the students experience in using search engines for class-related assignment. Findings have implications for teaching and learning, as well as for improving the design of web search engines.

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### A Workflow Analysis-Based Metadata Design for Korean Broadcasting Systems Using Focus Group Interviews with EBS, KBS, and MBC

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**Abstract:** Unlike text, audiovisual content proves difficult to retrieve, access, and reuse unless delivered on the basis of a systematic metadata pertinent to user, producer, administrator, and performer needs. As a result, any attempt on the part of a broadcasting company to provide content-based services without a comprehensive metadata would inevitably confuse and inconvenience both the service provider and its users. While

Korean broadcasting companies have been cognizant enough of this fact to generate various metadata for the purpose of managing content, these metadata fail to contain all elements relevant to the broadcasting industry. Such circumstances therefore call for a metadata design tailored to the broadcasting workflow by accommodating developments in the IT environment foundational to the production and utilization of broadcasting content as well as by considering changes in user demand and media format (i.e., Webbased broadcasts, mobile Web broadcasts, DMB and IPTV services). The resulting metadata would be based on the in-depth identification of elements capable of encompassing these changes in the field of broadcasting and incorporate a correspondent application profile (AP) design for broadcasting content.

The purpose of this study is to use focus group interviews with metadata personnel at EBS, KBS, and MBC for a comprehensive analysis of the metadata implemented in Korean broadcasting. More specifically, the objectives of the study are 1) to investigate and analyze largely inconsequential or idle metadata elements, 2) to discern the metadata elements required by broadcasters in order to adapt to changes in content production and service environment, 3) to adopt reusable elements from present metadata and propose a new broadcasting metadata AP which reflects the needs extrapolated from the focus group interviews, and 4) to enhance interoperability by providing mappings between the AP developed in this study and international broadcasting standards such as EBUCore and PBCore

The results of the study offer a summary of metadata elements currently not in use in the broadcasting environment and recommend the application of a detailed description element for content change, more specific metadata elements related to copyright management, and metadata elements enabling second screen services. The improvements suggested in the study were mapped to international metadata standards such as EBUCore and PBCore, resulting in an interoperable AP as integrated with international standards for broadcasting metadata as it is indicative of new requirements in the field.

**Keywords:** Broadcasting Metadata Design, EBUCore, PBCore, PPL, Second Screen, Rights Metadata

### Is Your Library Social? An Appraisal of How Social Media Are Being Used in Academic Libraries in Ghana

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**Abstract:** The social media are arguably powerful tools for social and business communication, interaction and networking. But they are also effective tools for collaborative research and information dissemination. The advent of the social media brought in its wake a new generation of users or patrons who demand new kind of library services. The 21<sup>st</sup> century Librarians in Ghana must therefore reposition themselves to provide services that will meet the expectations of this new generation of users. To what extent have academic libraries in Ghana integrated social media in library service provision? A survey of academic libraries in Ghana (including 4 public university libraries, 3 private university libraries and 3 polytechnics) will be carried out to determine the extent of social media integration in their library service provision. These institutions were purposely selected in order to make a comparative analysis. Data collecting technique will include the use of questionnaire and an online survey of

selected libraries' websites. A comparative case study approach will be adopted in analyzing the findings. The result of the paper will provide an insight on current trends in library service provision.

#### **Posters**

# **@WeReaders: A Case Study of Twitter as a Survey Instrument**

Elizabeth Willse

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Abstract: This poster explores the use of Twitter as a data collection tool in the context of a larger study of student academic reading practices. Since its launch in 2006, Twitter has been used as a vehicle for brand promotion and general social interaction (Zandt, 2010). Researchers have studied user behavior and message content of established Twitter accounts (Williams, 2013); and educators have used Twitter to increase levels of student engagement (Junco et al, 2012). However, we have not found published evidence of a Twitter-generated survey instrument We tested Twitter as an instrument for hosting and generating research data by creating a Twitter account dedicated to our reading project. We then scheduled a mixture of question Tweets and content designed to foster an authentic social media presence. This poster will detail the specific steps of developing this research tool, including establishing the Twitter account, recruiting, engaging and motivating participants, and sustaining research-oriented conversation. An analysis of the reach of the Twitter account and the types of data collected with this instrument will be used to assess the strengths and weaknesses of this novel survey method.

**Keywords:** Twitter, Research design, Research methodology, Data collection, Survey design, College students

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# Changing Times, Changing Needs: Assessing Access Services Lola Rudin<sup>1</sup>, Adriana Sgro<sup>2</sup>, and Elizabeth O'Brien<sup>3</sup>

<sup>1</sup>Assessment Librarian, University of Toronto Scarborough, Canada <sup>2</sup>Team Lead Access Services, University of Toronto Scarborough, Canada <sup>3</sup>Library Systems Coordinator, University of Toronto Scarborough, Canada

**Abstract:** The Access Services Unit at the University of Toronto Scarborough (UTSC) Library offers services in interlibrary loan, intercampus delivery, and course reserves. Presently, the Access Services Unit consists of two full-time and one part-time library technicians. As patrons increasingly turn to the Internet for their research materials, interlibrary loan services have faced dwindling user traffic. **At the UTSC Library**, the number of requests for interlibrary loan has declined by 40% in the past five years.

The library has decided to conduct a review of Access Services with the goals to improve library services to better serve the patrons, to improve workflow, and to reassign capacity where possible. Objectives include streamlining procedures and identifying new services and programs that would allow us to better utilize the skills and experience of our current staff. Our methodology will include an analysis of present policies and procedures, a literature review of best practices, site visits to other academic libraries, staff interviews, and a key user survey on the use of library services.

This poster will explain the review process, including a description of our goals, objectives, and methodology; a summary of best practices and site visits; and a detailed description and analysis of the user survey.

# The End-Users' Requirements of The Library of Arab International University (AIUL)

Maysoun Restoum & Steve Wade

Department of Informatics, University of Huddersfield, UK

**Abstract:** Academic libraries have been considered the heart of the Higher Education Institutions. They have attached to academic institutions to serve students, academic staff and other potential users in the Higher Education Institutions. The main aim of them is to meet their academic requirements. End-users' requirements imply their tangible needs of the library services, information resources (IRs) and other facilities. These requirements increased and changed with the adoption of Information and Communication Technology (ICT) in education systems and academic libraries. ICT has radically affected the way of

accessing information and performing research. Thus, academic libraries had to be flexible and dynamic to accommodate rapid and significant technical changes.

The purpose of this study was to determine the end-users' requirements of the AIUL in Syria. Mixed methods approach, using questionnaires and interview, was adopted to collect quantitative and qualitative data about the participants. 228 of undergraduate students (USs), and 30 of academic staff (AS) participated in this study to understand the end-users requirements of the academic libraries. Furthermore, 8 academic librarians were involved in obtaining further understanding.

Findings showed that end-users' requirements of the AIUL were high in terms of providing supportive IRs, experts, high quality services and personal services; however, USs were more demanding than AS regarding providing social, learning and personal space, while AS were more requiring regarding the quality and recency of IRs. Additionally, borrowing printed books, accessing journals, obtaining general and specific information were required to support their educational process.

Keywords: Academic Libraries, AIUL, End-users' requirements, ICT

# The Evolution of the University Knowledge Centre: From the Library to the Learning Commons

Diane Buhay, Lisa Best

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Abstract: For centuries the university library has been the centre of academic life. Traditionally the library was a quiet environment that students could use when they wanted to focus on their work, access course and research materials, and to socialise. In a recent study, Gardner and Eng (2005) reported that students commonly used a university library to study (alone and in a group) and to use a computer (classwork and personal reasons). In this study, 36% of students reported that they visited the library to check out books and only 12% reported they visited to access print journals. Recently, the structure of many university libraries has changed and the traditional library is being integrated into larger learning commons, in which various student services are integrated to provide students with a central resource to meet their needs. Moore and Wells (2009) asked users about their perceptions about a learning commons and found that users liked the fact that many resources were available under one roof but at the same time, they reported that they wanted quiet study spaces and the availability of reference librarians for face-to-face contact. Both Gardner and Eng (2005) and Moore and Wells (2009) found that the biggest concern that students had about the library or learning commons was the availability of computer terminals.

The purpose of the current project was to examine student perceptions and experiences in a traditional university library and a learning commons. In 2011, at the University of New Brunswick, Saint John, the traditional university library was replaced with a learning commons. We compared the perceptions and experiences of students using the two environments. Our overall goal was to examine student perceptions of utility of these learning environments and determine if individual differences affect the preference.

#### **Highlights on the Open Access in Arab States**

#### Mandy A. Taha Abdou

Open Access Consultant, UNESCO, Egypt

**Abstract:** Open access (OA) is known as a new revolutionary paradigm that avails scholarly journals on the Internet. Yet, it is not a totally new information paradigm. It existed long ago in the Arab world through old Arabic knowledge hubs like Cairo, Baghdad and El-Qirwan. However, with time, scholarly communication declined, resulting in the so-called "knowledge gap" between the North and the South. Nowadays, the Arab states are trying to share in the Open Access movement through many initiatives and projects. I will present some highlights on the historical journey of Open Access in the region, and its present state in the Arab world.

**Keywords:** Scholarly communication, Scholarly publishing, Open Access, Arabic knowledge hubs

# Information and Communication Technologies in Teaching and Learning Professional Information

#### Lúcia Maria Sebastiana Verônica Costa Ramos, Maria Cláudia Pestana

University of Sao Paulo, Brazil

**Abstract:** Society, in general, has been transformed dramatically in every way. The advancement of Information and Communication Technologies (ICTs) has contributed significantly to speeding up the process of change. In the current knowledge society, individuals share virtually the same interests and goals. Information networks and knowledge are built all the time. The globalization of information and fierce competition have affected many areas of knowledge in which fits the teaching and learning of information science, and therefore the training and qualifications of the professional levels of leadership and direction, is located the Information Manager. It is on that formation, mediated by advances in digital technology and its possibilities, that fits the present work.

Keywords: Information technology, Teaching and learning, Professional information

# Information Literacy: A Technological Approach Decio Funaro<sup>1</sup> and Vânia Funaro<sup>2</sup>

<sup>1</sup>Master student in Information Science, Escola de Comunicações e Artes, Universidade de São Paulo, Brazil

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**Abstract:** This paper proposes a model of practical curriculum technologies and knowledge required, shaped and justified by the Information Literacy adopted to be applied in the various areas of knowledge patterns. This proposal is based on the competencies suggested by the American Association for School Librarians (AASL) and the connection with technological segments and levels of expertise: basic, advanced and desirable. Believing that learning as an evolution, an educational methodology associated with practical aspects, is more likely to be assimilated and leverage knowledge, mapping the paths autonomously for everyone.

### LIBER Rankings Project: Keeping European Research Libraries Relevant

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#### **Abstract:**

#### **Background**

The European Commission has decided in 2011 to launch a new multi-facetted 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 Development1 and the Centre for Higher Education Policy Studies2) 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 Libraries3) 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, held in April 2013, has brought together experts and stakeholders to define the role libraries will have in U-Multirank. A set of aggregate indicators for

Research and Teaching and learning has been proposed for inclusion in U-Multirank and is currently being reviewed before formal approval.

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.

### A New Library Service in Support of Qualitative Research: Training in the Use of CAQDAS Software NVivo

Judy Senecal

MacOdrum Library, Carleton University, Ottawa, Ontario, Canada

**Abstract:** A growing number of academic libraries in Canada are providing support for CAQDAS software. At the MacOdrum Library of Carleton University in Ottawa, Canada we first started providing support to our faculty, students, and library staff in the use of NVivo, 4 years ago. A nexus of circumstances led to our providing support: the discovery that one of our faculties was purchasing licenses but providing no support themselves, a flurry of questions about NVivo from faculty and graduate students in the span of a few months, and the exposure of library staff members to the software in their own work. A quick survey of Canadian university web sites at the time showed that fewer than half provided any kind of support in this software and only in one case was the library the provider. This however, appears to be changing. This brief survey also found that NVivo was occurring in job postings and academic CVs as desired and marketable skill. Since our university's Strategic Plan at the time included a number of goals that involved increasing graduate student enrollment, maximizing opportunities for students to engage in research, and supporting students in their efforts to find employment this seemed an ideal opportunity for the library to contribute to these goals. We currently have 2 library staff members who provide NVivo training in a variety of formats: half day hands-on workshops, one-on-one consultations, and presentations to classes, usually graduate level courses in Research Methodology. A new initiative that is being worked on currently involves introducing students in a 4th year undergraduate class to this versatile tool. This past year we provided 21 workshops (triple our previous year) and our one-on-one consultations grew by 40%. An added benefit is that we are now able to offer in-house expertise to our own library staff whether they are working on library-related research (e.g. analyzing comments from LibQUAL+) or pursuing advanced degrees of their own.

Rev@Odonto Portal: An Experience in Dentistry Area: Case Report

Lúcia Maria S.V. Costa Ramos, Maria Cláudia Pestana

University of Sao Paulo, Brazil

Abstract: The project of portal implantation started in May 2010 and initially featured four titles of scientific journals and the implementation of the collection in Rev@Odonto portal took place from May 2010 to May 2011. The second project in 2013, has 12 titles accounting for an increase of eight titles compared to the first project signed between the Coordinating Center of VHL Dentistry Brazil, SciELO and the editors of scientific journals in dentistry area. Archives in Dentistry, Brazilian Journal of Oral Science, Scientific Clinical Dentistry, ABENO Journal, Journal of Paulista Association of Dental Surgeons, RBO, Brazilian Journal of Dentistry, RPG Journal of Postgraduate of FOUSP., Journal of Surgery and Traumatology Buco-Maxilo-Facial, Journal of the Faculty of Dentistry of Passo Fundo University, RGO. Gaucha Dentistry Journal, RSBO. Journal of South Brazilian Dentistry and Stomatos. The purpose of this work is to report the road traveled to ensure sustainability of Rev@Odonto portal allowing the initial proposal of democratization of access to information remains.

**Keywords:** Scientific journal Portal, Dentistry, Scientific information

# Role of Academic Discipline in Students' Reading Preferences Marsha James

Pratt Institute, USA

Abstract: Demographic variables have been identified as one of the factors that influence the process of technology adoption (Rogers, 1995). However, in the context of academic e-book adoption, the role of demographic variables in the use and adoption of e-reading technology is less clear. Some studies identify the effects of demographic variables, such as disciplinary affiliation, on students' reading practices, (Foote & Rupp-Serrano, 2010; Simon, 2011), while other studies do not observe the same effects (Bole & Dempsey, 2011). The proposed paper will present research that was aimed at exploring tangible connections between demographic variables and their influence on the adoption of e-book technology and media preferences in the academic setting. Interview and diary instruments were developed to collect the following types of data; student participant demographics, information task type, information source and information media use and preferences. We examined the effects of demographic variables on digital media adoption in academia, with specific focus on Humanities, Arts and Social Sciences (HASS) and Sciences, Engineering, Industry and Technology (SEIT) students from four (4) New York City universities. The findings point to the existence of relationships between student demographic characteristics, specifically, disciplinary affiliation, and the use and preference for digital content and reading device. The identified link between disciplinary affiliation and the use and preference for digital or print content and reading media can be explained by various factors, including disciplinary culture and demands (e.g. information currency, accessibility, transportability, resource availability, and other factors outlined in the literature) (Folb, Wessel & Czechowski, 2011). The study findings shed light into the reading demands and requirements of academic readers and have implications for the development of collections and user-centered services in academic libraries.

Keywords: Technology adoption, Reading practices, E-books, Academic libraries

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# User Satisfaction with Library Service Quality: A study of University Libraries in India

#### Rakesh Mohindra<sup>1</sup> and Parveen Khurana<sup>2</sup>

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#### **ABSTRACT**

The quality of services and users satisfaction is two significant facet of effective service management. In recent years academic libraries become more user focused due to varied needs of users information needs in electronic environment and new library services to provide the appropriate type and level of service to satisfy users needs. Libraries measure constructs of Library service quality and user satisfaction from the customer's point of view to meet the users' expectation. Both constructs are very important to improve overall performance of the organization. The study had three objectives: To determine library user expectations and perceptions levels; to determine the levels of service quality in libraries and to examine whether there exist any relationship between service quality and library user satisfaction among three universities of north India.

Survey questionnaire was adapted from the SERVQUAL scale and distributed to 450 respondents among three Universities of North India, 384 questionnaires completely responded were analyzed. Regression analysis was done to look for significant predictor of user satisfaction. The analysis reveals that service quality has a statistically significant positive effect on user satisfaction represented by R2 (Coefficient of determination). This implies that

the various dimensions of service quality accounts for 43.9% of library user satisfaction among universities studied and the remaining 66.1% was due to some other factors. Future research could be done on other percentage. The Analysis further shows that Reliability dimension contributes most towards user satisfaction, while Empathy dimension contributes the least. It was also observed that the libraries cannot afford to ignore any of the dimensions, since they all appeared to influence customer satisfaction, at different degrees.

The study contributes to the existing literature examining relationship between service quality and library user satisfaction using the SERVQUAL scale, and its empirical results could be helpful to bridge the gap in service quality in managing the library to serve the users in optimal manner. Since the study was limited to three universities India, the study can be extended to other categories of libraries.

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