Book of Abstracts

Qualitative and Quantitative Methods in Libraries QQML2010

International Conference

Editor

Anthi Katsirikou

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Contents

Preface

Dear Colleagues,

We welcome you in Chania for second time to QQML 2010 International Conference. As for the first one, the 2nd Qualitative and Quantitative Methods in Libraries International Conference includes research papers and applied works from all over the world. It is a pleasure for us to know that the conference implies to the dialogue between librarians and other professionals on the management problems and their alternative solutions, in a more cost-effective manner. As librarianship is a field that is enriched by other scientific disciplines more and more, library professionals must advance their ability to change, share their sources and improve their effectiveness. The most important factor to improvement of organization is the systematic and thorough study of methodologies by knowledge and information workers, who are charged to manage change.

That's why we pay great attention on the workshops and accepted these three very important workshops that are scheduled in this conference. It is among our ambitions to continue this practice in future QQML conferences as a tool to everyday life of library professionals.

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WORKSHOPS

1. WORKSHOP TITLE: Statistics for library associations

At the QQML2010 meeting in Chania the IFLA Statistics and Evaluation Section would like to pilot its new course on statistics for advocacy. The Section would like to recruit up to ten people who can participate actively in the first trial of this course, and who would also be willing to:

- Participate in pre-workshop surveys, and evaluation sessions during the workshop
- Critically review and evaluate the relevance of workshop content
- Share their experiences
- Evaluate whether the workshop met stated objectives
- Assess whether the training method effectively delivers the content and achieves learning objectives
- Discuss the development and rollout of the programme, including transition to a blended learning environment.

The course itself is described below.

Purpose

When we communicate with politicians, funding bodies or library stakeholders, we need numbers, statistics and evidence to prove our points and underline our arguments. Advocacy and lobbying are not possible without relevant data. This is the reason why statistics are a vital issue for library associations and libraries who want to influence political processes in their country or on an international level.

Project

This one day course deals with the role of statistical reasoning and documentation when we need to argue the case of libraries. The content was developed at an IFLA Workshop in The Hague in December, 2009 by members of IFLA's Statistics and Evaluation Section. The course project is part of IFLA's new development programme for Building Strong Library Associations (BSLA). The project work, which still continues, is documented at the project blog.

Program

The course will be highly interactive, including brief lectures, discussions, case presentations and practical exercises. The day is divided into seven sessions.

- Opening session: plan for the day, brief self-presentations, overview of the BSLA programme (55 mins.)
- Why should we study statistics?
- Which aspects of library work should we focus on?
- How can we interpret data?
- How can we collect data?
- How can we present data?
- Final session: next steps, course evaluation, certificates

Participation

The course is offered on Friday, May 28, 2010. To get your feedback, we will organize a brief evaluation session immediately after the course. The whole program lasts from 9 a.m. to 5 p.m. including a one hour lunch break. It will be directed by Tord Hoivik (Norway) and Colleen Cook (USA).

Resources

- About the course project at http://iflastat.wordpress.com/
- About BSLA at http://www.ifla.org/alp/bsla

2. WORKSHOP TITLE: Greening the Library by Building Partnerships and Opportunities: Creating Authentic Learning Experiences for Students, Librarians and Faculty Using a Theme-Based Interdisciplinary Approach to Education

Summary:
By proactively assessing the instructional trends and cultural climate of an institution, a library can provide service-learning opportunities for undergraduates and graduates that are core to the research and educational mission of that institution. At Iowa State University (ISU), administrators strongly encouraged the development of course work and research that support sustainability. As an integral part of the ISU community, the library conducted an environmental scan of sustainability activities and possible partnerships during the spring months of 2009. After completing this process, the assessment librarian created authentic learning opportunities, based on the theme of sustainability, for students across a variety of disciplines.

Assessing campus instructional needs, developing interdisciplinary partnerships and creating instructional rubrics are part of the process in creating successful learning opportunities that benefit the students, faculty and the library. A case study of a graduate internship that involved the disciplines of marketing, rhetoric, and library science will illustrate how thinking outside the box can create partnerships and collaborations in key instructional areas. In this case study, the graduate student created a comprehensive A to Z sustainability research guide. The guide, generated at the library, links to the University's "Live Green" homepage and to departmental web pages that provide Iowa State University with a unique and powerful discovery application. In addition, this service-learning opportunity required that the graduate student create a marketing campaign and outreach plan to the community. The student took the "show on the road" presenting his work to campus departments, symposiums and student groups. The student, not a librarian, "advertised" the library as an essential resource for both learning opportunities and as a research resource.

And from all the work done at ISU library you might wonder what is happening now? We are developing the outline for a rigorous and exciting service-learning course that will be offered each semester that meets the needs of the library, students and various academic disciplines. Conference participants will be provided with a brief overview of ISU library's service learning case study. In addition attendees will:
- Review the philosophical grounding of theme-based interdisciplinary learning
- Assess their institution's needs and trends
- Identify potential collaborations with faculty, administrators and/or campus centres
- Develop an understanding of benchmarks and rubrics
- Understand that benchmarks and rubrics are core assessment tools for any library instruction
- Have the tools needed to replicate ISU library's success at their own institution

From this experience, workshop participants will receive resources and tips for developing service-learning opportunities at their library that they might not have known existed. It is expected that members in this workshop will have an instructional interest that they want to develop into a collaborative learning opportunity.
Workshop organizer: Sarah Passonneau, Assistant Professor, Assistant to the Dean of the Library, Iowa State University (USA).

3. WORKSHOP TITLE: Quantitative and Qualitative Research Methods Workshop.

Summary:
Have you ever considered whether the data and the evidence you collected is valid and

reliable? How do you determine validity and reliability in quantitative research? And what does it mean to have trustworthy information in qualitative research? The Quantitative and Qualitative Research Methods workshop will introduce you to some of these concepts. Bruce Thompson will discuss issues of score reliability and validity and bring forward examples from the library and information science literature and in particular the LibQUAL+(R) protocol. He will present some of the examples in the context of data analysis with a statistical package that used to be known as SPSS and has recently being rebranded as PASW. The key goal is to develop an understanding of judging the trustworthiness of quantitative data in the social sciences. The workshop will also be an opportunity to showcase some of the qualitative grounding that took place during the development of the LibQUAL+(R)   protocol.

Martha Kyrillidou will introduce you to qualitative research issues through the ARL Library Profiles research project which is based on analysis of textual descriptions of ARL research libraries with a software package known as Atlas.ti. She will discuss with you the dynamics of a multi-constituency iterative research process that includes multiple ARL libraries, key stakeholders, and a core team of researchers and coders. The key goal is to understand how library leaders are transforming historical ways of describing research libraries and seeking new ways to define and measure the research library of the 21st century.

Workshop organizers: Bruce Thompson (Chair), Texas A&M University, USA, and Martha Kyrillidou, Association of Research Libraries, Senior Director of ARL Statistics and Service Quality Programs, USA.

Dr. Bruce Thompson is Distinguished Professor of Educational Psychology and CEHD Distinguished Research Fellow, and Distinguished Professor of Library Science, E-mail: bruce-thompson@tamu.edu. Bruce Thompson is a former member of the Council of the American Educational Research Association (AERA), a former nominee for AERA President, and a former editor of American Education Research Journal, Section on Teaching, Learning, and Human Development, and several other journals. Bruce is especially known for (a) his work on effect sizes, and (b) his contributions to creating the LibQUAL+(R) protocol. He has published numerous articles and papers in both areas, and has written several standard textbooks in statistics.

Dr. Martha Kyrillidou, E-mail: Martha@arl.org. Martha Kyrillidou is responsible for all aspects of the Statistics and Assessment capability at ARL, which offers assessment products and services to the library community ranging from descriptive statistics to evaluative tools focusing on service quality improvements in libraries. Martha provides analytical support to libraries and other program areas within the ARL office and has widely disseminated assessment developments through a rich publication record. She has been one of the developers of LibQUAL+(R) and co-chairs the biennial Library Assessment Conference.

SESSIONS
SESSION TITLE: Assessing and Evaluating Reference: Views from the Academic Library Reference Desk. Coordinator: Lynne M. Rudasill, Associate Professor of Library Administration, University of Illinois at Urbana-Champaign, USA.
Presenters:

1. Using Data to Make Quick Decisions About a New Merged Service Desk: A Case Study/ Elizabeth Cooper, Reference Services Team Leader, Emory University, e-mail: liz.cooper@emory.edu
2. Moving from the Behind Desk and Into The Flow: Assessing the Impact of Research Support Activities./ JoAnn Jacoby, New Service Model Programs Coordinator, University of Illinois at Urbana-Champaign, e-mail: jacoby@illinois.edu
3. One Story with Many Chapters? Assessment in Complex Library Organizations./ Kathleen Kern M., Reference, Research and Government Information Services, University of Illinois at Urbana-Champaign, e-mail: katkern@illinois.edu
4. View from a Virtual Reference Desk. / Lynne Rudasill, Global Studies Librarian, University of Illinois, e-mail: rudasill@illinois.edu
5. One Librarian at a Time: Group Assessment via Self Assessment./ Cynthia Johnson, University of California, Irvine, Head of Reference and Carol Ann Hughes, University of California, Irvine, Associate University Librarian for Public Services.

SESSION TITLE: Library and Information Science Post-Graduate Student Research
Coordinator: Prof., Teresa S. Welsh, University of Southern Mississippi School of Library and Information   Science,   USA
Presenters:

1. User and Non-user Studies: A Bibliometric Research Project/ Sheila Hammond-Todd, Mesa County Libraries, Grand Junction, CO, USA
2. A Comparative Study of Five Topics in ERIC and Library Literature and Information Science Full-Text Databases/ Margarita Rhoden, School of Library and Information Science, The University of Southern Mississippi, USA
3. Anthropological literature on social phobia: An examination of publishing and indexing patterns/ Julie D. Shedd, Mississippi State University Libraries, USA
4. Documentation of Library Compliance in Regional Accreditation Standards: A Survey of Accreditation Liaisons and Librarians of Level-One Institutions of the Southern Association of Colleges and Schools/ Donna Ballard, District Library Director, East Mississippi Community College, USA
5. Publishing Patterns and Authorship in the Scholarly Literature of Digital Object Identifiers: A Bibliometric Analysis/ Donna Ballard, District Library Director, East Mississippi Community College, USA
6. Characters of Color. A Content Analysis of Picture Books in a Virgin Islands Elementary School Library/ Marilyn M. Brissett, Gladys A. Abraham Elementary School, Virgin Islands Department of Education, USA
7. Bibliometric Study for a Three-Year Citation Analysis of Scholarly Literature on K-12 Education Technology/ Christine A. Garrett Davis, School of Library and Information Science, The University of Southern Mississippi; Bertha C. Boschulte Middle School, Virgin Islands Department of Education, USA

SESSION TITLE: Using qualitative and quantitative methods in digital library education and research. Coordinators: Sirje Virkus, Lecturer, Tallinn University, Institute of Information Studies, Estonia, e-mail: sirvir@tlu.ee & Aira Lepik, Associate Professor, Tallinn University, Institute of Information Studies, Estonia, e-mail: aira.lepik@tlu.ee

Presenters: Students of the Digital Library Learning (DILL) Master programme:
1. Alice Adejoke Bamigbola: Students' Conceptions of the Use of Web 2.0 Tools: A Phenomenography Approach.

2. Yibeltal Tafere Bayih: Application of Preservation Metadata for Long-Term Accessibility of Digital Objects.
3. Kanita Besirevic Qualitative Research Applied to Investigation of Cultural Heritage Digitization Projects in Bosnia and Herzegovina.
4. Monica Wawira Gakindi: Information Access Needs of Satellite Campuses in Kenya - Can OER Close the Gap? The Case of Moi University - Nairobi Campus .
5. Sara Grimm: User Preferences for Delivery of Collection Content via Mobile Devices: Lessons for the Development of a Smartphone Application.
6. Juan Daniel Machin Mastromatteo: Exploring User's Information Behavior in Social Networks.
7. Mehrnoosh Vahdat: A Study of Image Attributes and Metadata in Photogrammetric Three-Dimensional Data in Cultural Heritage Domain.

SESSION TITLE: LibQUAL+ Lite and Related Experiments: All you ever wished to know and some of it in Greek. Moderator: Martha Kyrillidou, Association of Research Libraries, USA .

 The papers presented here will attempt:
1. To ascertain the equivalence of long and Lite scores for the desired and minimum expectation scales identifying whether there are differences in the total, subscale, and linking item scores between the long and the Lite protocol overall as well as within the three main user groups: undergraduate students, graduate students and faculty.
2. To examine the reliability and validity of LibQUAL+ Lite and long forms for different languages, institutions and user groups.
3. To establish a set of norms for LibQUAL+ Lite for institutions to use for benchmarking purposes.
4. To compare experimental methods for point of use surveys and identify lessons learned from their implementations.

Presenters:
1. **Reliability and Validity of LibQUAL+ Lite: 2008-2009 Beta Results** / Bruce Thompson, Martha Kyrillidou, Colleen Cook.
2. **LibQUAL+ Lite Norms: 2008-2009 Beta Results/** Colleen Cook, Bruce Thompson, Martha Kyrillidou.
3. **Differences in LibQUAL+ Lite and long scores for desired and minimum expectations scales: 2008-2009 Beta Results** / Martha Kyrillidou, Coleen Cook, Bruce Thomson.
4. **Point of Use Web surveys: yet another experimental approach./** Terry Plum and Martha Kyrillidou.

SESSION TITLE: Measuring usage and impact of online content provided by academic libraries. Session organizer: Herbert Gruttemeier, International Relations, INIST-CNRS, President ICSTI, France.

Presenters:
1. **The University Library as Strategic Investment: Results from the *Return on Investment* Study, Phases I & II/** JoAnn Jacoby, University of Illinois Library, New Service Model Programs Coordinator, USA and Paula Kaufman, University Librarian and Dean of Libraries, USA
 2. **Usage statistics for online resources made available by libraries through portals: the INIST-CNRS example./** Magali Colin, User monitoring Project Manager, INIST-CNRS, Dominique Lechaudel, Database Administrator, INIST-CNRS.
 3. **Usage as an Acquisitions tool, is it valid?/** Helle Lauridsen, Summon service Manager, Serials Solutions.
 4. **Developing UK PubMed Central in response to user behaviour/** Philip Vaughan,

Program Manager, UKPMC, British Library.

SESSION TITLE: Quantitative and Qualitative Methods in Library Management: a Practical Approach. Coordinator: Prof.dr. Angela Repanovici, Transilvania University of Brasov, Romania.
Presenters:
1.   **How to teach Library Management?/** Angela Repanovici, Transilvania University of Brasov, Romania
2.   **Using statistics - quality management in the library./** Ane Landoy, University of Bergen Library, Norway
3.   **Digital Library Management for Visibility of Academic Staff Scientific Research: a case study at Transilvania University of Brasov, Romania./** Prof. dr. Luciana Cristea, Prof. dr. Angela Repanovici
4.   **Greek academic repositories: Policies (?) for making available scientific and cultural content./** Manolis Koukourakis, University of Crete Library, Greece
5.   **Electronic academic libraries services valuation: a case study of the Portuguese electronic scientific information consortium b-on./** Luiza Baptista Melo and Cesaltina Pires, University of Evora, Portugal
6.   **Library Network Support Services: quantitative and qualitative measures for assessing the impact of information literacy initiatives on learners./** Jerald Cavanagh, Institute Librarian, Limerick Institute of Technology, Republic of Ireland and Padraig Kirby, LNSS Librarian Project Coordinator, Limerick Institute of Technology, Republic of Ireland
7.   **Management of integrated systems for digital information porcessing using biomimetic structures./** Ion Voncila, Mioara Voncila, Dunarea de Jos, University of Galati,   Romania
Digital Library: trend and challenge in digital world./ Mihaela Dragu, Romanian Academy Library, Bucharest, Romania

Keynote Speakers

Fifty Years After – Almost

F. Wilfrid Lancaster

Professor Emeritus
Graduate School of Library and information Science, University of Illinois at
Urbana-Champaign, USA

Abstract. The speaker's career has largely been associated with the evaluation of library and information services, a field that he entered in 1963, with his first book related to the subject being published in 1968. In this keynote speech he will review what has been achieved (and not achieved) in this broad area in the past (almost) 50 years.

Short biography. F. Wilfrid Lancaster is Professor Emeritus in the Graduate School of Library and Informotion Science at the University of Illinois where he has taught courses relating to information transfer, bibliometrics, bibliographic organization and the evaluation of library and information services. He served as the editor of Library Trends for a period of 20 years. He was appointed University Scholar for the period 1989 -1992. He is the author of twelve books, six of which have received national awards, and has three times received Fulbright fellowships for research and teaching abroad. His books have been translated into Arabic, Russian, Chinese, Japanese, Korean, Spanish and Portuguese. From the American Society for Information Science and Technology he has received both the Award of Merit and the Outstanding Information Science Teacher award. Professor Lancaster has been invoved in a wide range of consulting activities, including service for UNESCO and other agencies of the United Nations.

Data for new services: developments in international library statistics

Dr. Roswitha Poll

Former chief librarian, Münster University Library, Germany,
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Abstract. The main source for library statistics is the standard ISO 2789 "Information and documentation – International library statistics". ISO 2789 functions as basis for other standards in information and documentation where statistical data and their definitions are required, especially for quality assessment. The standard was first published in 1974; the 2nd revised edition appeared in 1991. The increasingly quick follow-up of revisions (ed. 3 = 2003, ed. 4 = 2006) reflects the rapid change in the information world. In its meetings in 2009, the working group responsible for ISO 2789 decided to start the next revision of the standard.
During the last decades, the "new" topics in library statistics concerned the electronic resources and services that were taken up in the 3rd edition. This area is still expanding and changing, but additional library tasks and services will now be added, ranging from preservation and digitisation data to issues of open access, out-of-the-wall actions or library participation in new Internet services.
The ISO standard has served as basis for many national statistics, but worldwide library statistics have not yet been achieved, though an overview of library developments is urgently needed. IFLA (International Federation of Library Associations and Institutions), the UNESCO Institute for Statistics and the ISO committee responsible for quality and statistics within information and documentation joined forces in a project for developing a short, practical and meaningful set of data ("global statistics") that could be used worldwide.

The paper shows the newest developments in ISO 2789, the results and follow-up of the "global statistics" project and the importance of the data for demonstrating quality and impact of libraries.

- terminology and definitions
- methods of data collection
- methods of analyzing the data

Keywords: library statistics, standards

Short Biography. Dr. Roswitha Poll was chief librarian of Mónster University Library from 1987 to 2004. She is now chairing the committee «Quality-Statistics and Performance Evaluation» and the working groups for «International library statistics», «Performance indicators for national libraries» und «Statistics for library buildings» within ISO (International Organization of Standardization). Since 1989, she has been working in IFLA (International Federation of Library Associations), especially in the section «Statistics and Evaluation». She works in projects dealing with management and evaluation of libraries and information systems. Her present publications deal with measures for the input and output, quality, costs and impact of library services.

Information Policies in the Knowledge Economy: a question of balance
Professor Carla Basili

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Abstract. To date, the science information system is struggling with competing trends, opportunities and constraints: enabling technological developments, funding limitations and pressures, open policies, private/public interests and values, quality control and scientific legitimation policies, just to mention the major ones.
The current climate of rapid change in science and society further heightens these tensions and places new demands on the science information system.
In this context and in the light of the past of scientific information policies, the current scientific information scenario is described, particularly as the competing forces acting upon it.

Short Biography. Carla Basili is Promoter and Co-ordinator of the European network on Information Literacy (EnIL) and of the European Observatory on Information Literacy Policies and Research. Her research interests focus on scientific information diffusion and transfer and, since 2001, concentrte on Information Literacy policies in Higher Education.

Parallel Sessions

Access and use of European information: a comparative analysis

Ana Lúcia Terra

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Abstract. The aim of this communication is to present some results of a survey on access to European information among a group of 234 users of 55 European Documentation Centres (EDCs), from 21 European Union (EU) Member-States. The findings of a survey questionnaire to 88 EDCs managers, from 25 EU Member-States will also be analyse. So we will compare two different points of view regarding issues like the best sources to access trustworthy and impartial European information, the factors determining access to information on the EU and the frequency of this access will.
Keywords: Information behaviour, Information access, European Information Network

Accuracy of Citation in "Library and information Science quarterly Journal"

Hassan Behzadi[1] and Majideh Sanji[2]

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Abstract. The aim of this study was to determine the accuracy of citation in "Library and information science quarterly" journal. A retrospective analysis was performed based on the 4 issues (43 articles) of this Journal from year 2008 (Volume 39). Only original articles were chosen for review in each selected issue. A sample of 230 references was randomly selected and each was checked for accuracy against the original referenced paper. Citation errors were categorized as major, intermediate or minor and quotation errors as major or minor. Citation errors occurred in 41.8% of the references, 21.4% of which were considered major errors.
The "Library and information Science quarterly Journal" is the oldest and widest scope journal in the field of library science in Iran
Keywords: Library and information science quarterly; reference lists; reference errors; reference accuracy; scholarly writing

Activities and Experiences of Academic Librarians Embedded in Online Courses

Starr Hoffman

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Abstract. This benchmarking project used both quantitative and qualitative methods to explore similarities and differences among embedded librarian activities at six different U.S. institutions. A series of interviews, document reviews, and surveys were used to gather information about librarian experiences working with online courses. This topic becomes increasingly relevant as more distance education programs develop. The study results reveal much about the development of online information literacy, collaborative relationships between librarians and faculty, and the changing role of the academic library in an online environment.

Activity Based Costing (ABC) System – A World Class Cost Information for A World Class University : Some Contextual Factors associated with it the Perceived Usefulness in A Multi-campus University System

Jamalludin Helmi bin Hashim[1]; Assoc Prof Dr Nik Nazli bt Nik Ahmad[2]; Prof Dr Maliah Sulaiman[2] and Prof Dr Rafikul Islam[3]

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International Islamic University, Malaysia.

Abstract. This paper reports the findings on the study of the factors associated with the perceived usefulness of Activity Based Costing (ABC) in the biggest public non-profit university in Malaysia. While the first part is to develop the ABC model for a multi-campus university system, this paper will focus on the classification of contextual factors on the perceived usefulness of ABC information in the university's setting. It will also investigate the difference perceptions on the usefulness of ABC information, between the respondents groups, i.e., users and preparers. Basically, it is extended from the same theoretical ground which was done by Hwang and Evan (1993), Estrin *et al*., (1994) and Duron (2001).

This study employed mixed method approach for data collection; qualitative data to develop the ABC Model and quantitative to investigate the perceived usefulness of ABC information. The ABC model was develop using the ABM-SAS's software based on Department of Education, Training and Youth Affairs (DETYA), Australia model and were modified to suit with Malaysian environment. Then the questionnaires on the perceived usefulness were mail to users and preparers across all branch campuses (14 of them) of UiTM. Finally, the post-survey interviews were made with the selective personnel to confirm and explain some issues that cannot be found in the surveys.

Out of 24 attributes listed in the questionnaires, the confirmatory factor components and alpha coefficients were used to compute and conclude the eight factors (72.35%) explained the perceived usefulness of ABC information in the study setting. Further analysis was carried out to test five hypotheses with regard to possible different perceptions on the ABC information between users and prepares, and into two dimensions of ABC information, namely: (i) Quality, and (ii) functionality.

The result shows that user perceived the information produced by ABC is of higher functionality as compared to the information produced by the traditional costing. Preparers however perceived the similar quality and functionality between these two groups of respondents. It can be concluded that factors similar to those associated with the perceived usefulness of ABC in the for-profit organizations (i.e., the potential for cost distortions, decision-usefulness of cost information and satisfaction with the current cost management system) would also be present in a multi-campus non-profit institutions of higher learning as well. In addition, it was expected that the campus (or faculty)'s cluster might represent a new and unique factors related to the perceived usefulness of ABC information in this particular setting.

Keywords: Costing; Activity-Based Costing; Multi-campus university system; Confirmatory factor analysis; Mixed method approach.

Anthropological Literature on Social Phobia: An Examination of Publishing and Indexing Patterns
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Abstract. Social phobia, or social anxiety disorder, afflicts 10 to 13 percent of Americans with anxiety that prevents them from entering performance situations and with physical symptoms of anxiety including nausea, sweating, and muscle aches. As a uniquely human ailment and possible culture-bound disorder, social phobia is a worthy topic to examine frequency of occurrence in anthropological literature. Word frequency analysis was applied to 36 years of anthropological journals with top ten impact factors as determined by *Journal Citation Reports* and words related to social phobia counted. Conclusions include implications for further study and proposed solutions to anthropology's endemic grey literature problem.
Keywords: Anthropology, Bibliometrics, Psychology, Social phobia, Shyness, Word frequency analysis

Application of Data Mining: Significant Predictors of Book Loan in UiTM Campus Samarahan's Library
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Abstract. Data mining techniques has been used extensively in the business field to analyze information from massive amount of data. These techniques can also be applied to other area of interest such as in information systems where the librarians would be able to determine who are more likely to loan books. This data collection can be used for administration purposes in future planning. Therefore, this paper intends to gauge the significant predictors which contribute to the probabilities of book loan by students in UiTM Campus Samarahan's library using the predictive modeling techniques in SPSS Clementine. The chosen modeling techniques: decision tree, logistic regression and neural network; will be tested to data and yet compared to obtain the best prediction model. The significant predictors from the best model are then disclosed.
KeyWords: Data mining; books; library; students; decision tree; logistic regression; neural network

Application of ICT and IM in public libraries in Mashhad (Iran)
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Abstract. This study was conducted to investigate the application and communication technology from the viewpoint information management (IM) in organization of libraries of Astan Quds Razavi in Mashhad (Iran). The following methods were used to collect data for

the study: questionnaire survey of chiefs, semi-structured interviews with librarians and chiefs and observational visits in the libraries. This study was confined only to central library and branch libraries of Astan Quds Razavi in mashhad. The analyses revealed that the central library had information management tools such as hardware, software and network facilities to some extent, branch (dependent) libraries do not ICT-based resources and services and these could not reaching the users to the expected extent. Majority of branch libraries had very poor hardware. Library automation in this organization was commenced since 2004. Computer was used more in the libraries than any other hardware. The library circulation found to be the most popular area for automation. All of the libraries had very poor electronic information resources. All of the chiefs indicated " to modernise the library activities", " to render effective services to the user community", " to keep the users up to date in their fields", " to improve the quality of existing services" as their major reason for objections for ICT application. Most of the libraries were hampered by lack of ICT knowledge of user, lack of funds, Lack of infrastructure, and lack of skilled professionals to embark on automation of all library management activities and application of ICT. Chiefs of libraries proposed a variety of measures of formal orientation and training on ICT to become more effective users. The study provides recommendations to enhance library automation and effective and efficient application of ICT.

Keywords: Information Communication Technology , Information management (IM); Information; Communication technologies; Library automation; Iran; Public libraries; Astan Quds Razavi

[1] - Information Communication Technology
[2]- Information Management

Application of the EFQM Excellence Model in University Libraries in Iran: Case Study of IT quality management of SCU and JUMS libraries
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Abstract. Libraries and information centers, as service organizations, need standard methods to measure and evaluate their services in order to enhance the quality of their services in support of improving the performance of their mother organizations. Hence, the achievement of excellence is the challenge facing the University Library in the 21st Century. The present article describes the application of the the Excellence model of the EFQM to study the quality of the IT management in Shahid Chamran University and Jundishapur University of Medical Sciences libraries. The results of the study reveal that: first, the model (with some modifications) is applicable in library environment; second, the libraries under study, scoring 499.681 points out of a total of 1000, are on a fairly middle level of quality of IT management. Enablers received 275 points out of 500, and Results gained 224 points out of 500. Strengths and weaknesses are identified in detail.

Keywords: Excellence Model, EFQM, Quality management, Information Technology Management, University Libraries, European Foundation for Quality Management

Assessing the needs of history teachers as digital library users: a multiple-source methodology

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1. Introduction

Understanding actual and intended communities of digital library users is key to making the massive amount of digital content now available in memory institutions accessible to those who need it. This presentation reports on a multiple-source qualitative research project that investigated the information seeking needs and behaviors of history teachers using digital collections of primary sources for classroom instruction. The aim of the project is to shed light on a segment of digital library users who are frequently referenced but often overlooked during digital library development. The ultimate goal is to provide strategies for designing digital library services that take users' expectations and objectives into account.

2. Problem Statement

History teachers represent an ideal class of users for digital collections of primary source materials. However, the abundance of cultural heritage content available in digital format is often overwhelming, especially when collections are difficult to search and navigate. In general, digital library collections and services are built without regard for real world applications, such as instruction. User studies can be used to inform the design of search services and user interfaces so they better meet the search skills and needs of users.

3. Methodology and Conclusion

Based on this assumption, a series of user studies were conducted employing multiple qualitative research methods, including semi-structured interviews, lab-based search tasks, a concept mapping exercise, and online surveys. Different sets of data were collected to gain greater insight into the work practices and environment, seeking and searching habits, mental models, and emotional aspects of US history teachers as they search for primary source materials. Ultimately a multifaceted profile of this community of library users was outlined. Strengths and weaknesses of the methods employed will be discussed, as well as the broader implications for the design of digital library collections.

Automated Metadata Harvesting Among Greek Repositories in the Framework of Europeana Local: Dealing with Interoperability

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Abstract: EuropeanaLocal is a best practice network project, which will help Europeana to enhance its content and service by applying automated metadata harvesting among distributed repositories. Greek content providers and its metadata aggregator, the Veria Central Public Library (VCPL), are in a testing metadata harvesting period, in the framework of EuropeanaLocal. This paper analyzes the practices that the Greek Institutional Repositories

follow in order to transform their metadata schemas to European Semantic Elements (ESE) profile and to export this profile through OAI-PMH to the VCPL aggregator. In addition, it describes the way in which the VCPL aggregates the ESE exported metadata output. Finally, it emphasizes on the transformation and aggregation tools that have been launched on a local level, before Europeana disseminates its official ones.

Availability, Use and Performance of Electronic Library in a Nigerian University: A Case Study of Tai Solarin University, Ijebu Ode, OgunState, Nigeria"

Kolawole Akinjide Aramide and Olatunji Pius, Olaojo

Abstract. This study focused on the availability, use and performance of electronic library with particular emphasis on TAI Solarin University of Education e-Library. It discussed the range of collection of e-resources available for use, and how much the electronic library is able to meet the teaching, learning and research needs of the students.

The descriptive survey method was adopted for the study while the major data collection instrument was the questionnaire. A total of 701 copies of questionnaire were administered on the respondents out of which only 617 were returned with useful responses. The findings from the study revealed e-Books, charts, e-journals, e-magazines/newspapers, internet/e-mail facility and multimedia resources as e-resources commonly available for students use, even though the students do not make regular use of these resources, which may be due to lack of appropriate skills to use this facility. The study further revealed that the students rely very much on the electronic library mainly for textbooks search and articles search which is majorly due to the fact that textbooks and articles are very much relevant to the academic and research activities of the students. The study also revealed that the students are satisfied with overall performance of the electronic library, most especially in terms of value of services, access to information, response time, ease of use and quantity of collection. The variables of Perceived Usefulness (PU), Perceived Ease of Use (PEU) and Self Efficacy (SE) were found to have a significance influence on electronic library use by the students. The study affirmed the adequacy and relevance of the electronic library to the academic and research needs of the students as well as the satisfaction of students with the electronic library

Recommendation were made on the need to improve on the e-library collection through the provision of more e-resources that are relevant, and up to date at and affordable rate for the students while at the same time students should be given adequate training and orientation on how to maximize the use of the e-resources available through the electronic library.

Awareness and use of electronic information resources at the College of Health Sciences in Makerere University: a pilot study

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Abstract. Electronic resources (e-resources) are a significant component of library collections in any country. Every year, large amounts of money and time are invested in the development and management of e-resources. During the past decade, most libraries in Uganda witnessed a gradual but steady transition from using predominantly print to using both print and e-resources. This transition has changed the way information is packaged, processed, stored and disseminated to meet the ever-increasing demands of library users. The paper presents the methodology and findings of a pilot study of an on-going Doctoral study. It is aimed at pre-testing the research instruments (questionnaire and face-to-face interviews) prior to data collection for the main study. **Objective:** The paper sets out to investigate if the environment is supportive enough to make the users confident and comfortable in using e-resources in their Libraries. Mechanisms used in monitoring and evaluation of usage are also examined in order to identify critical factors and to document usage trends. **Methodology**: The study was a cross-sectional survey that examined the College graduate students, researchers, academic staff, and Librarians at a single point in time. Questionnaires and face-to-face interviews were used to collect qualitative and quantitative data. **Findings:** Awareness, continued information literacy for Librarians and users, and availability of infrastructure are major factors influencing usage of e-resources. Challenges: Limited resources to support human resources, constant power supply, monitoring and evaluation, and ICT infrastructure.
Keywords: Electronic resources; users; academic libraries; Makerere University College of Health Sciences; health information use.

Benchmarking and tolerance levels in selected Nigeria's private university libraries

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Abstract. Benchmarking is a total quality tool used to measure and compare a particular library's work, processes and resources with those in other libraries, aimed at increasing the library's performance after adopting best practices. The study which traced the antecedent of benchmarking, the need, the benefits, what to benchmark and the concept of standardization of library operations was to ascertain the tolerance level of best practices in the library of study and other benchmarked libraries. Thirty four private universities were in existence as at the time of this study. Twenty three (23) had existed for at least four years at the time of this research, 2009 from which a sample of four (4) libraries which were considered as prominent was selected. This number cuts across (6 geo-political zone of the country, two owned by religious bodies and two by individuals. Age of the institutions was considered because it was expected that after four years, a library should be in a position to render a number of services expected in an academic library. Structured questionnaire designed to assess facilities available was forwarded to University Librarians in the sample. The study revealed that the practices in the Redeemer's University, Nigeria were not at variance with the benchmarked libraries.

The Benefits of a Quality Management System – the Case of the Merger of two Universities and their Libraries

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Abstract: At the turn of this century, it was decided to renovate higher education in Finland, and as a result three new universities were created by merging existing units. One of these

new Universities is the University of Eastern Finland which was formed from the Universities of Joensuu and Kuopio. The merger started in the year 2007 and in 2008 and 2009 there was a reorganisation of the two previous libraries' management and service provision to create a single new Library. The quality management system that the Library has been building was used in this process. The paper describes how the strategy was defined; the organization developed as well as the working order and a quality manual for the new merged library was created. The benefits of a participant management style as well as retaining the best practices from the old libraries into the new unit are emphasised.

Bibliometric Study for a Three-Year Citation Analysis of Scholarly Literature on K-12 Education Technology

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Abstract. The purpose of this study is to identify certain basic elements of citation behavior as it pertains to literature in "education technology." Journals and books were ranked highly as scholarly sources of literature in "education technology." Other notable occurrences of scholarly communication included government reports, the Internet, periodicals, conference papers, theses and dissertations. Journal citations were spread across multiple disciplines and subject categories without yielding a dominant number of occurrences to unique journal titles. The tendency of journal citations to overlap disciplines and subject categories revisits a suggested trend by earlier research of interdisciplinary linkages that should be further explored.

Books circulation and teaching support: a case study in a Nutrition-Dietetics department library

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Abstract. The support offered to tertiary education by the general books collection for circulation of a department's library is very significant, especially at the undergraduate level. In this research, we monitored the book loans in a department of Nutrition-Dietetics, in Greece, for the year 2009. The book titles loaned for a year were classified by subjects and the data were compared with the undergraduate syllabus of the department, to conclude on the teaching support these books offered. The results indicated that most of the books circulated in the library concerned tables of food composition, dietetics handbooks, and biochemistry-physiology books. On the other hand, the number of book titles loaned to students within 2009 was limited compared with those offered for loan. Our results show the need for close cooperation between librarians and tertiary education teachers in library management as well as the need for constant monitoring of the students changing needs.

Bridging The Digital Divide: Teaching with Digital Content using free internet resources
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Abstract. In the present virtual library environment most academic institutions integrate digital content with their instructional resources. The digital content may be proprietary or subscription contents which may be in form of texts, images, databases or other types of digital content. Most libraries in developed countries have the financial resources to afford digital resources or create the needed content in house by providing access to the resources through library web pages that are portals for the resources. Many of the libraries provide access to Internet resources to supplement their resources. All of this is made possible by the existence of library and information networks that has created resource sharing environment that is part of the information superhighway and trained staff that are able to create the portals through which the faculty and students can access the digital resources.

Today many institutions in developing countries cannot afford to maintain good libraries due to lack of finance, information infrastructure and unmet demand for professionally trained staff that can access digital content and organize the content for easy access. The internet contains vast amounts of digital content that if harnessed and repackaged can be used to supplement the meager resources that that the libraries have. A number of initiatives have been introduced such as African Digital Library has been established to help scholars in developing countries, the resources are currently not being used as much as they should be due to the fact that the librarians are not trained to operate in virtual library environment and are either not aware of how to locate free internet resources and teach their patrons to use the resources.

This presentation will provide a model for locating, organizing and integration digital content into instructional resources for teaching Human Anatomy.

KeyWords: Internet Resources, Virtual Libraries, Virtual Librarians, Information Portals, Digital Libraries, Digital content Management, Training,

Case Study Method for Research on Digital Library, Information Policies, and Bibliographic Organization.
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Abstract: The aim of this paper is to analyze the case study as a methodological alternative for investigation in three areas of Library and Information Science: digital library, bibliographic organization, and information policies.

The research developed by some authors shows the need to use the case study method as a means to establish a bond between theoretical research and reality experienced on practice, with the understanding that a feedback must be observed between investigation-acquired knowledge and empirical knowledge.

Even though studies developed on library science are presented as case studies, a trend towards a descriptive treatment has been observed. This situation has to be modified using a better approach of the case study.

The paper will discuss the following themes:
1.   Case Study Method.

2.   Case Study Method as an Alternative to Bond Investigation and Practice in Library Science.

3.   Case study use in three investigations on Library and Information Science;

Reference:

Denzin, Norman and Lincoln Yvonna. 2nd ed. Handbook of qualitative research. Thousand Oaks: Sage, 1994.

Eckstein, Harry. Case study and theory in political science. B p. 79-138. B In Strategies of inquiry /Ed. by F.I. Greenstein and N. W. Polsby. B London: Adisson-Wesley, 1975. B p. 103.

Eldredge, Jonathan. Evidence-based Librarianship: the EBL process. B p. 341-354. B In Library hi tech. B, Vol. 24, no. 3. B (2006). B p. 342.

Gundermann Kroll, Hans. El mΓ©todo de los estudios de caso. B p. 251-288. B In Observar, escuchar y comprender: sobre la tradiciΓ³n cualitativa en la investigaciΓ³n social / MarΓa Luisa Tarres, coordinator. B MΓ©xico: Facultad Latinoamericana de Ciencias Sociales, 2001. B p. 256.

Powell, Ronald R. Library and Information Science Practitioners and Research. B p. 49-72. B In Library & Information Science Research. -- Vol. 24, no. 1 p 49-72. B (2002).

Turner, Kathlyn. Do Information Professionals Use Research Published in LIS Journals? B In IFLA Council and General Conference (2002: Glasgow, Scotland) Available in: http://dlist.sir.arizona.edu/909/01/009-118e.pdf Consulted: 13-October-2009.

Yin, Robert K. Case study research: design and methods. B 3rd ed. B California: SAGE, 2003.

Keywords: Case study, Library Science Research, digital libraries, Bibliografic Organization, Information policies

A Case Study of Knowledge Work Process and Performance Evaluation on Academic Library in Taiwan

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Abstract. The aim of this study is to examine the discrepancy in the application of knowledge work process of librarians and their viewpoints between performance evaluation and knowledge work processes. We adopted Davenport's five different primary activities among knowledge work-flow: acquisition, creation, packaging, application, and reuse of knowledge. The data collected via a survey on librarians of academic university library to analyze the characteristics and relationships of professional activities. The result indicates that the acquisition phase "reuse" ranks the highest frequency of knowledge work process, "application" follows, and the last one is "creation". The consequence indicates that the operation of acquisition impedes the workers' innovation during job routine processes within organization. Also, the promotion of performance in the organization will go down gradually due to the high rank of "reuse". As an information-based organization, academic library expect to have workers with special skill and capability of facilitation knowledge flow to foster valuable assets in the information era. Implication and future studies have also been provided.

Keywords: Knowledge work processes, Performance evaluation, Librarian

Characters of Color: A Content Analysis of Picture Books in a Virgin Islands Elementary School Library
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Abstract. The purpose of this qualitative content analysis is to determine if the picture book collection at the Gladys A. Abraham Elementary School Library accurately reflects and therefore serves the needs of the majority of its students. A disparity exists between the actual ethnicities represented by the school population and those depicted in the picture book collection. Less than ten percent of the books most frequently selected by kindergarten through 3rd grade students depict realistic stories and a disproportionate percentage (88%) of books have settings in the United States.

Keywords – Caribbean, Collection development, Content analysis, Ethnic groups, Picture books, School libraries, Virgin Islands

Collection Development Policy
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Abstract. Public libraries must meet the needs of a multicultural and diverse community through their traditional and non-traditional services and collections.
Greek public libraries are famous for their various administrative schemas, a fact that results in different stances, different services and, consequently, in different rates of development.
Since collection management and development is still a significant part of Greek public libraries' services, setting collections' priorities, delineating the potential users and identifying those mechanisms and procedures necessary for the creation and implementation of a Collection Development Policy will ensure constant and reliable development and protect the library from internal and external threats which may influence and affect its services.
The formulation of such a policy in the form of a formal document, which will receive administrations' approval, constitutes a tool for constant development of the library's resources and services, promoting collections' strengths and the philosophy behind decision-making.
The aim of this presentation is to investigate the policy's necessity in theory and practice, discovering the role it plays in a public library environment as a mechanism designed to foster the evolution of collection content in conjunction with user needs.
Its objectives are to discuss the uses of the CDP within the library and in the wider environment, the administration of the document and through a discussion on why should a CDP be formulated, to give rise to the nature and value of the policy in a public library.
Keywords: collection development policy, collection management, collection development, library management

A Comparative Study of Five Topics in ERIC and Library Literature and Information Science Full-Text Databases
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Abstract. The purpose of this study is to compare the Educational Resource Information Center (ERIC) and the Library Literature and Information Science Full-Text (LLISFT) databases' coverage of five topics to find if relevant information would be omitted by restricting searches to one database.
Design/methodology/ approach- Quantitative research study.
Findings- A comparison of two databases' search attempts to answer three research questions on five topics relative to education and general interest.
Practical Implications-This illustrates the importance of knowing various databases and search terms to use in providing extensive information to researchers.
Originality value- The study presents a small comparison of five topics to expand a glimpse into the ERIC and LLISFT databases. Universities and public libraries invest a large portion of their materials budget in providing the best access to information they can afford to meet the needs of the users and knowledge of what the databases offer is critical to its use.
Keywords- accessible database, controlled vocabulary,ERIC,LLISFT,

Comparison of Q&A Sites and Digital Reference Services in Japanese Public Libraries for Their Accuracy of Answers

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Abstract. In recent years, question and answering (Q&A) sites are becoming very popular in Japan. People have submitted 34 million questions to Yahoo! Chiebukuro (most famous Q&A site) and obtained 90 million answers. Q&A sites provide answers free of charge to anyone and to any questions. Questions that have been brought to libraries (such as questions about books, journals, persons' information, etc) are also accepted. Then, do Q&A sites provide accurate answers compared to the reference services in public libraries? Based on this research question, we asked the same questions to Q&A sites and public libraries' E-mail/in-person reference services and compared their answers.
We gathered 62 questions which were considered to be appropriate for reference services. The sources are (1) records of reference services in some public libraries, and (2) LIS course materials in our university. We asked these questions to E-mail/in-person reference services. The number of public libraries we investigated is 30. Among them, 12 libraries provide E-mail reference services. After asking libraries and obtained answers, we submitted the same questions to two representative Q&A sites, Yahoo! Chiebukuro and Oshiete! goo.
We found that accuracy of reference services - both by E-mail and in-person - seems to be in accordance with so-called 55% rules (Hernon & McClure (1986)). Accuracy of Q&A sites seems to be the same. In other words, they are not inferior to reference services in terms of accuracy. They sometimes indicated the reliable sources like in reference services too. Coffman & Arret (2004) stated that many of the commercial reference services had died and no longer constituted a threat to libraries. But in Japan, we should not be so optimistic.

References:
Hernon, P. and McClure, C. R. (1986). Unobtrusive Reference Testing：The 55 Percent Rule, Library Journal, Vol.111, No.7, 37-41.
Coffman, S. and Arret, L. (2004). To Chat Or Not to Chat: Taking Another Look at Virtual Reference, Part 1, Searcher, Vol.12, No.7. http://www.vrd2003.org/proceedings/presentation.cfm?PID=196

Courses on Research Methods in the Library and Information Science (LIS) Master's Programs at Universities of the Baltic States and Nordic Countries

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Abstract: The quality of research in Library and Information science is directly linked to the quality of education, and the way research methods are acquired according to the study programs of universities.

At the presentation of the conference and in the article making use of the content analysis the courses on research methods included in the Library and Information science master's programs of universities at the three Baltic States – Estonia, Lithuania and Latvia and in the Nordic countries – Denmark, Sweden, Finland and Iceland were analyzed and compared. A particular emphasis was drawn upon the volume, topic and the acquiring quantitative and qualitative research methods. The article will analyze the various understandings of the concept "Research Methods" in the study books of research methods for the library and information science.

Keywords: Library and information science master's programs, courses on research methods, quantitative and qualitative research methods, content analysis

Co-word analysis of doctoral dissertations in Information Science in the Republic of Croatia from 1978 to 2007: Contribution to research of development of Information Science

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Abstract. For the analysis of doctoral dissertations in Information Science in the Republic of Croatia (from 1978 to 2007), keywords are used in order to get an insight into the development of Information Science. By the method of co-word analysis of keywords with which doctoral dissertations are indexed, a network of clusters that match following scientific disciplines is obtained: archivistics and documentation, librarianship, communicology, museology, information science, information systems and lexicography. By cluster and data visualization and the overview of keywords frequency, the development of subjects and the correlation of clusters in Information Science, during the period of thirty years in which doctoral dissertation are made, is shown. The results of the co-word analysis about the development of Information Science in the Republic of Croatia are shown according to time periods, but also according to affiliation to certain disciplines inside the Information Science.

Keywords: Co-Word Analysis, Cluster, Data Visualization, Information Science, Keywords Analysis, Doctoral Dissertations

Customer Service Excellence, Charter Mark and the quality of university library services in the UK: a case study of Aston University

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Abstract. In March 2008 the UK Minister for Transformational Government Tom Watson launched a new quality standard for the public sector in the UK, the Customer Service

Excellence standard. Replacing the previous Charter Mark, this is designed to be a practical tool to support and drive public services to be more responsive to people's needs.

As outlined on the UK Government website for this award:

The aim of Customer Service Excellence is to encourage, enable and reward organisations that are delivering services based on a genuine understanding of the needs and preferences of their customers and communities. The foundation of this tool is the Government's Customer Service Excellence standard which tests in great depth those areas that research has indicated are a priority for customers, with particular focus on delivery, timeliness, information, professionalism and staff attitude. There is also emphasis placed on developing customer insight, understanding the user's experience and robust measurement of service satisfaction. (Cabinet Office, 2009)

Both Customer Service Excellence and its predecessor, Charter Mark, are awards which result in formal accreditation to a recognised standard, based on self-evaluation and continuous improvement. Designed to measure customer satisfaction rigorously, both awards are intended to be used by organisations to provide information to underpin action plans for future improvement of services. Charter Mark will be phased out by 2011.

This paper will assess critically the role and value of such schemes in the information sector, via an analysis of the impact such an award had on the perception of quality of a case study university library service from the perspective of its internal customer base and that of its peer group. Whilst this is a UK Standard, nonetheless, with its focus on developing customer insight, understanding the user's experience and robust measurement of service satisfaction, the analysis of its relevance has global implications for service design and delivery in a volatile and rapidly-changing environment.

Reference

UK Government Cabinet Office (2009) Customer Service Excellence: the Government Standard. Available online: http://www.cse.cabinetoffice.gov.uk/homeCSE.do Accessed 14 December 2009

Data Envelopment Analysis for Library Management: the case of a Federal University in Rio de Janeiro, Brazil

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Abstract. The paper assesses the performance of a sample of 37 libraries pertaining to a federal university in Rio de Janeiro, Brazil. Referring to the years 2006-2007, the assessment is based upon the estimation of a DEA model that generates both efficiency scores and optimal changes in current allocations for each year. Nonparametric tests disclosed significant differences between efficient and inefficient groups, but yearly scores remain quite undistinguishable. Markovian analysis indicates that the percent of efficient libraries will likely decrease in the long run. One can assert that efficiency analysis enhances the assessment of library performance by providing both relative positions and potential improvements along time.

Keywords: Library management. Performance assessment. Efficiency analysis. Data Envelopment Analysis.

Database "Scientific publications of the Bulgarian scientists" (2000-2008)

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Abstract. The process of European integration in the area of the science and education and of the creation and function of the united European scientific space demands the tendencies in the science and scientific potential of certain country to carry out research and analyzed with adequate analytic methods. The compare analyses both in diachronic and in prognostic aspect are with special importance for the development of the scientific researches and for the state politics for science and education. In the moment doesn't exist complete survey of the scientific production of the Bulgarian scientists, which can give systematized information for the status and contribution of the Bulgarian science in the worldwide information exchange and which can serve for taking correct decisions in the process of transformation of the system "science" in Bulgaria in correspondence with the European and word standards.

The project **"**Scientometrics Analyses for the Development of the Bulgarian Science in the Period 2000-2008 in the way to the European Integration in the science and education" has for its strategic purpose to make a study and to give a solid and promising information for the development of the Bulgarian science, for the publication activity and citation of the bulgarian scientists for 8-year period, which can serve for the needs of the state agencies and for the scientific community and as a base by the development of national strategy for education and science. The project includes the next stages:

Stage 1: Development of Database "Scientific Publications of the Bulgarian Scientists" (CD) over Facts from Science Citation Index for the period 2000-2008.

Stage 2: Publication Activity of the Bulgarian Scientists 2000-2008 – Scientometric analyse

The created to the project database "Scientific publications of the Bulgarian scientists" 2000-2008, together with the scientometric analyses will be placed in electronic version and on CD. Through the present project, with its partnership, the scientists from State University of Library Studies and Information Technologies (SULSIT) and the Center for science studies and history of science by the Bulgarian academy of science take up the challenge to answer of the information needs of the state agencies and of the scientific community in respect of information for the publication activity of the Bulgarian scientists and other observation over the trends in the development of the scientific-research sphere.

Keywords: database, scientometric analyses, scientific publications, state politics for science and education

Determining which print material to keep on site: a quantitative analysis based on use statistics

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Abstract. Large academic research libraries face many challenges, ranging from shelf space demands, threats to collections budgets, and growing skepticism among budding "online" scholars that print books are crucial. The sentiment that libraries' inherent, local value and presence is merited on a scale seen prior to the e-journal revolution is being called into question. With the Google Books project in the works, and today's students and scholars increasingly drawing on the web at both beginning and end of inquiries, how should libraries and librarians determine which print resources will occupy precious and diminishing shelf space on campus? Indiana University, Bloomington, is a Research I, large Midwest school with over 40,000 students and more than 2,000 faculty; its library is currently ranked in the top 20 of the country, with over 8.7 million volumes state-wide. Though one main library dominates the holdings for this campus, books are gradually being moved out. In the past decade, one climate controlled, off-site storage facility has been constructed and filled (it is

specifically designed to hold and preserve over a million volumes, and a second storage facility is currently being built); three subject-specific campus libraries have been closed, several campus science libraries have been downsized, and library space has been turned over to departments with various space needs. In the past we have studied the use of print material acquired in a single year, and then correlated publishers with user demands. This paper extends circulation questions and describes how one science library (Swain Hall, collecting physics, astronomy, mathematics, statistics, computer science / informatics) used borrowing data, "in-library use" (browse) statistics, and number of years books sat unused, across the entire science collection, as metrics to help guide which print material could be stored with minimal impact on teaching and research.

Keywords: use statistics, collections management, collection development, monographs, academic libraries, science libraries, SirsiDynix, campus space

Developing Digital Repository in Indian Languages: issues and Challenges
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Abstract. From various studies it has been found that India is only a country of diverse culture where more than 2500 languages are being used for communication from region to region and state to state. The constitution of India recognizes 22 languages as official language in India. With the emerging of new Information Technologies and Open Source Software, many organizations and libraries have been initiated various projects to develop digital repositories of manuscripts and documents available in different Indian languages. The prime requirement to make searchable digital documents, OCRing of the scanned text is must. The major hurdles of transcribing material printed in Indian Language scripts into digital format is the unavailability of powerful OCR system for most of the Indian Languages scripts. Necessary efforts are being made in India on war footing basis to develop OCR for Indian Languages. However, OCR for "Devanagari Scripts" has been developed. Digital data created in XML and having the support of UNICODE standard format provides easy accessibility to the users from any platform. The purpose of this paper is to discuss the various issues involved in digitization of Indian Language scripts like creating digital document with International Standard format, visualization the document without lost any actual structure, allow to users for different types of search options such as truncation search and word variants, developing browsing and navigation software for ease of use. The challenges related to the user centric, content centric and system centric are also discussed.

Keywords: Digital Repositories; Indian Language; Language Scripts; Digitization techniques.

Development of management methods in Polish libraries and centers of information. Existing solutions, new trends and research directions
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Abstract. The paper presents a recent transformations of management methods in libraries and information centers. There is discussed an influence of management techniques on the

effectiveness of library services. The variety of methods which can be useful for libraries are presented as well as criteria that management staff should use during the selection phase. The paper also contains a summary results of recent years, poll-based research on the use of management methods in Polish libraries, including comparison of the state from 2003 with the present state in 2009. There are also discussed a nowadays research trends in the library management.

Developing UK PubMed Central in response to user behaviour
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Abstract. UK PubMed Central (UKPMC) is a free digital archive of biomedical and life sciences journal literature (http://ukpmc.ac.uk). Based on PubMed Central (PMC) in the USA, it is being developed into an innovative resource for the UK research community. It is funded by the 8 major funders of medical research in the UK.

UKPMC now gives users access to 1.7 million full text journal articles, as well as 19 million PubMed abstracts, UK National Health Service (NHS) Clinical Guidelines and PhD theses. It also incorporates grant reporting tools to enable researchers and their funders to manage their publication portfolios and assess the impact of funded research through metrics such as citation analysis. The new interface (launched in January 2010) has been developed and shaped by feedback from the user community. The UKPMC team based at the British Library conducted a number of focus groups, workshops and one-to-one testing sessions to trial interface designs and new search functionality (such as text mining) and to understand the workflows of the user community. The team has also conducted detailed statistical analysis of user behaviour on the site which has influenced design and functionality. The result is an innovative service driven by user requirements.

Keywords: Statistics, Scholarly information, Website design, Text mining, Open Archive

The Digital archive of the National Research Foundation "Eleftherios K. Venizelos"
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Abstract. The role of the National Research Foundation "Eleftherios K. Venizelos" in the sector of information management is reinforced by the project "*Scientific Documentation and Digitalization of Eleftherios Venizelos' Personal Archive*" within the Operational Programme "Information Society" (Invitations 65 & 172).

The project consists in the digitization, documentation, and presentation of the complete personal archive of Venizelos, or, to be precise, of the three parts that belong respectively to the Foundation, the Greek Literaly and Historical Archive's collection and the Benaki Museum which holds the largest and most important part. The project covers 45.000 records (approximately 160.000 downloads), while the available material is of important historical value.

The virtual digital archive, which is freely available and with full accessibility through the Foundations' web page (http://www.venizelos-foundation.gr/) leads to the full representation of the digital image of Eleftherios Venizelos and, by facilitating access to information, encourages scholars to push further the boundaries of knowledge.

What we are going to introduce is the software of the data base and the background of it's development, according to the national standards of archival documentation. The presentation through the archive will identify details of its operation by indicating the collection referring to important aspects of the work, era and life of the Greek statesman, covering the period 1880-1936.

Digital Libraries and the digital working environment: what is their effect on library staff for sharing their knowledge?

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Abstract: The development of digital libraries, the mass digitization of cultural heritage resources and the increasing use of electronic information resources both by library staff and users have changed the library environment and played a critical role in managing and disseminating knowledge. This new working environment has transformed the way in which employees share their knowledge. This research project aims to investigate the intrinsic and extrinsic factors that motivate librarians to share knowledge in their workplace. A data gathering tool applied in four European countries (Greece, Czech Republic, Portugal and Slovenia) in order to find out what factors motivate library staff to share their knowledge and manage its flow assists in its dissemination. The Results indicate that library staff acknowledge that the new digital working environment affect the way in which they share knowledge and recognize the importance of the role of intrinsic motivation in knowledge sharing and that team-based culture can benefit the success of knowledge sharing initiatives within libraries. Cross reference of data show similarities and differences from different countries. Finally, a set of Spearman's correlations were used in order to check any connection between the values under research.
Keywords: Digital Libraries, Knowledge management, Sharing Knowledge, Knowledge flow, Motivational factors, Motivation, Librarians, Library staff, Digitization

Digital Library Management for Visibility of Academic Staff Scientific Reasearch: case study at Transilvania University of Brasov, Romania

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Abstract. In information society research departments of university starts to organise digital libraries with documentation in the field and with working papers like research results. At Transilvania University of Brasov we build the first institutional repository from Romania.
In this paper it will be presented scientometry as a science and a fundamental instrument for determining the international value of a research department as well as for the statistical evaluation of scientific research results. The impact of the research measurable through scientometric indicators is analyzed. It will be presented the strategy to promote repository in mechatronics department. In this department are very good research results and the teaching staff involved opinion were very different. It will be elaborated the marketing strategy for implementing and developing digital repository at the Mechatronics department to Transilvania University of Brasov.
KeyWords: digital libraries, repositories, scientific research, mechatronics department.

Digital Library: trend and challenge in digital world / Sub theme: Management
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Abstract. The digital era brings along major changes concerning the manner to save, access and disseminate information. Digital Library is conceived as collective memory of the cultural patrimony, the values of the human intelligence being distributed in a global system of universal knowledge. The dissemination of information is no more possible than using flexible and open systems. Within this new paradigm, Library has to redefine its strategies. New competences, new abilities and more creativity are now needed in a competition which has to answer the challenges of digital era. A problem to discuss is to what extent digitization is to be integrated into the profession of librarian, if it involves an excessive valorization of this profession, while the Library transforms itself in a complex, progressive and dynamic system. Is it true that such an evolution can determine loss of profession identity facing the new technologies?
Even much time from now on, the user will need mediation to support his approach. For the librarian this means another level of implication, achieved only by the extention of his own qualification. The digital era requests higher competences about how to manage information as compared to the traditional ones. Digitization, instead of cancelling the profession of librarian, can create the frame to confirm the importance of this profession, opening new perspectives for it.
But, nothing which is fundamental will disappear. In the same time, it is no more possible to ignore changings in a world of tranformations, whose dimensions are amplified by the level of globalisation.
Keywords: digital library, digital era, digitization, librarian

Digitization and digital preservation in the documents of the European Union: Progress on the digitization of university libraries in Poland
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Abstract. This paper presents the variety of efforts ongoing at Community level to digitize and make accessible online the content of their archives, libraries and museums, progress towards the creation of the European digital library, as well as copyright and preservation questions relating to digital libraries and access to scientific information. Studies on progress in the digitization within the European Union, and in particular national strategies and targets for digitisation and digital preservation for example, university libraries in Poland.
Keywords: digitization, digital preservation, European Union, university libraries, Poland

Do fees constitute a barrier to public library use? Results from a research project in the Netherlands
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Abstract. The largely decentralized nature of the Dutch public library system, with local authorities commissioning and subsidizing the public library organization in their area, has given rise to a great diversity in tariff schemes and prices. In recent years, library organizations have voiced a growing dissatisfaction with this state of affairs. As external developments, above all the digitization of the media and information landscape and growing prosperity, have resulted in falling usage figures, public libraries are increasingly joining forces and scaling up. A growing need for harmonizing fees gave rise to the question what would constitute an 'ideal model', irrespective of cultural policy principles. The Dutch Public Library Association commissioned a research project in which membership, borrowing figures and financial registrations of over 20% of the public library members in the year 2008 were analyzed to assess the influence of fees on (a) accessibility (in general and for specific population groups), (b) number of borrowing transactions, and (c) the library's income from its members. Results show membership fees to be prohibitive only for the lowest groups on the income scale. Membership rates tend to rise rather than fall with increasing fees, possibly reflecting a historically grown price-quality match. Also, the number of borrowings per member tends to increase with higher fees.
Keywords: public library, tariff scheme, fee, harmonization, the Netherlands

Do we know image users?
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Abstract. There are millions of digital images available and their use has been increasing, especially via the Internet. Image users are very diverse from professional users such as art historians and designers to users searching for fun. However, we have still to learn a lot how users perceive, search for and use images. An image can be seen and described in different ways by different users. What users see depends on their perception and cognitive processes due to a difference between physical properties of the image and how the image is perceived. The purpose of this paper is to examine image users' behavior and to find out what users see in the images and how they describe them. Students of the Department of Library and Information Science and Book Studies of the Faculty of Arts at the University of Ljubljana are surveyed on a random sample of images taken from the Digital Library of Slovenia (dLib.si) and Flickr in order to assign keywords or tags to each image. Then, the tags are analysed and grouped into categories such as place, time etc. The tags asssigned to the dLib images are compared to the tags given to the same images by library professionals, and the tags assigned to the Flickr images are compared to the tags given by Flickr visitors. Finally, the obtained data are investigated to ascertain whether differences in tagging practices exist among library professionals, our students and Flickr users. Knowledge about image users and their behaviour searching or describing can be of great help to librarians. We want to better understand users' needs and to improve access to images.
Keywords: digital images, image retrieval, indexing, user needs, visual perception, dLib, Flickr, tagging, folksonomy

Documentation of Library Compliance in Regional Accreditation Standards: A Survey of Accreditation Liaisons and Librarians of Level-One Institutions of the Southern Association of Colleges and Schools
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Abstract. A specific set of guidelines for academic library accreditation is difficult to determine, due to differences in levels of academic institutions. The purpose of studying the perceptions of accreditation liaisons and librarians of Level-One, Associate degree-granting institutions, was to examine their compliance with regional accreditation standards and utilize the results to help librarians better understand the process of preparing for accreditation. A suggestion for further research would include the interaction of multiple authors of varying skills such as survey writing, statistical analyses, and experiences in accreditation. Librarian inclusion on accreditation committees, training, and collaboration with overall institutional effectiveness could also be studied and encouraged.
This paper was the Master's project of the author in May 2008, in the School of Library and Information Science, at the University of Southern Mississippi, Hattiesburg.
Keywords: Accreditation, Library(s), Standards, Colleges, Institution(s), Compliance, Academic(s), Education, Documentation

Economic Return of Investment (ROI) in Academic Libraries: Redeemer's University, Nigeria in Focus
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Abstract. The discourse on return on Investment (ROI) has generated concern of recent. This is probably because of the dwindling resources available for provision of services and chief Executives have continuously asked for justification for continued funding. To effectively merit investment, operators have taken the issue of output more seriously. Redeemer's University Nigeria Library was under focus in this study in an investigation that covered three (3) years. The study found that there were direct and indirect benefits accruable to library users. The study outlined the areas of investment in the library as purchase of books/journals, provision of furniture, staff salaries and other facilities. Under twelve (12) variables which includes stock and services and facilities, the study in graphical details showed that the library with an investment of one hundred and sixty four million, nine hundred and fifty thousand naira (N164,950,000.00) only, gave a return of two hundred and fifty nine million, six hundred and seventy five thousand naira (N259,675,000.00) only, 57.43% just in three years, corroborating the views of Keyes(1995) and Grifitths and Kings (1995). Conclusion was made by raising a number of issues on what the Library should stand for and the justification for continuous investment.

The Educational Background of Academic Library Deans
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Abstract. his study uses quantitative methods to study the degrees and majors of all 123 academic library deans at Association of Research Libraries (ARL) institutions. Statistical analysis shows trends in the educational background of library deans at the premier academic libraries of North America. Factors considered include presence or absence of a library

science degree, presence or absence of a doctoral degree, length of time in the dean position, major subjects of study, and Carnegie classification of the institution at which the degrees were earned. This study shows trends in hiring deans as well as commonalities among those interested in administrative library positions.

Educational choices and learning careers of LIS students as a social process: Theoretical and methodological considerations

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Abstract: This paper draws on a research study which explores the reasons behind young peopleB' choice of Library and Information Science as a field of study, and traces their education careers within the existing higher education departments in Greece. In particular, it focuses on some data and findings in order to illustrate the thesis that subject choice is a complex social process, and to discuss theoretical and methodological implications.

The problematic of the study has been developed with reference to the theories of Bourdieu and symbolic interactionism, and the core concept guiding the work, that of an educational career, provides the possibility for theorizing in an integrated way studentsB' LIS choice and their educational trajectories prior to and within the LIS institutions.

Data was collected through a questionnaire and semi-structured interviews, and the analyses relied on quantitative and qualitative methods and techniques. The construction of specific analytical tools, namely the Educational Career Index and the Divergence Index, were used to identify internal differentiations in the sample of students, and to interpret their educational decisions. Developing ways for organizing data and the constant interrogation of the data through the theoretical concepts, and vice versa, were used to elaborate the argument about the social character of studentsB' educational choices and trajectories.

One important finding of the study is the association observed between the different groups identified in the sample and the reasons attracting each of them to Library and Information Science. Another interesting finding relates to the transformations in the studentsB' perceptions of their field of study, and the trajectories they plan, which seem to be dependent on their possibilities to capitalize on the available resources, relative also to the institutional habitus of the department in which they study.

We shall discuss these two findings with reference to three interview cases, two of which are typical and conform to the quantitative part of the study, the other being recalcitrant vis-à-vis our main hypothesis. We shall thus have the opportunity to discuss, on the one hand, why the combination of two theories in the main study was necessary, and on the other, how the combination of quantitative and qualitative data has helped towards better understanding of the research problem.

Keywords: Educational choices, Educational career, Quantitative and qualitative methods

Electronic academic libraries services valuation: a case study of the Portuguese electronic scientific information consortium b-on

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Abstract. Most public institutions are under increasing pressure regarding their budgets. Portuguese research and academic institutions are no exception and consequently it is urgent to estimate the cost and the benefits of academic libraries services.

This paper explores some aspects of the value for the users of the Portuguese electronic scientific information consortium b-on (Biblioteca do Conhecimento Online). This scientific electronic scientific information consortium provides unlimited access to the researchers of academic institutions to the full texts of more than 16,750 scientific publications, via Internet, at the national level. In order to be able to estimate this value in monetary terms we used the contingent valuation method based on a willingness to pay scenario. Data was collected through an e-survey sent to the whole Portuguese academic users.

The main aims of this study are: (i) to investigate how the academic community values b-on; (ii) to investigate whether the willingness to pay is influenced by a set of factors (the frequency of use, whether the user knew previously b-on or not, the type of the user, the scientific area of the user, and the institution of the user); and (iii) to estimate the demand function of b-on services as function of the price and the previously mentioned factors. In order to achieve these objectives we use several regression analysis techniques – linear probability model (LPM), Logit and Probit and Tobit models.

The results show that the frequency of use, whether the user knew previously b-on or not, the type of the user and the scientific area of the user are all important explanatory variables of the willingness to pay for b-on and important determinants of demand for b-on services. Moreover, the demand for b-on services is quite sensitive to the «price».

Keywords: Academic libraries, Electronic sources, Impact evaluation, Logit, Probit, Tobit.

Electronic Scholarly Communication, Availability, Utilization and Its Imperatives to Academic Libraries in Nigeria

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Abstract. Research is human activity that is based on intellectual application in the investigation of matters, and every research is aimed at discovering new ideas or phenomena for the enhancement of knowledge. The scholarly discoveries are usually communicated to others through publications in journals either in printed or electronic format. Journals facilitate scientific research in academics through wider visibility and credit is being given to the academics as their works are read by other researchers. Nigeria is one of the underdeveloped countries with economic recession, this has really affected their rate of subscription to journal titles. Many libraries in Nigeria cannot boost of regular subscription to ten journal titles per annum. In recent time, e-resources have given new hope to researchers in Nigeria as they can now access journal titles through the internet. Most of the researchers prefer electronic journals due to its currency and speed in circulation, easy access and fast responsive publishing. Hence there is need to survey Nigerian libraries to evaluate their e-resources and itB?s imperative to academic library development in Nigeria. Survey method will be adopted for the study. The population will comprise of librarians in University libraries in Nigeria.

Keywords: Electronic scholarly, Communication Academics, E-resources, Academic libraries, Nigeria

e-Portfolios within a work-integrated learning environment: creating online questionnaires to establish research skills and information usage patterns of graduate students

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Abstract. Currently the work-integrated learning curriculum of universities of technology requires a portfolio of evidence from a student towards the end of study, typically work being done over four years. An electronic portfolio is a collection of electronic evidence assembled and managed by a user (in this case a student or learner), usually by means of a web-based system. Elements of such evidence can include text (for example completed and assessed research projects, images, multimedia, blog entries and even hyperlinks to other web-based files). An e-portfolio may permit multiple various users (e.g. academics, employees, learners) and for multiple purposes (e.g. for assessment of a learner's deliverables, for job-screening by potential employers, or to keep a record of achievements, building a curriculum vitae, and more). As part of the curriculum theoretical as well as practical research projects must typically be submitted to expand a learner's knowledge of a certain topic. Furthermore, a student's mastering of research skills are best demonstrated by the quality of these research reports being accumulated in an e-portfolio. Of these skills 'information gathering' (that is, the effective identifying, evaluating and using of relevant information sources) is of the utmost importance in the successful completion of research projects.

The premise of this paper is that a learner's capacity for information gathering can be improved substantially through formal or informal training only when the information usage patterns of learners are known to the instructor. Furthermore, the web-based environment which was developed to accommodate e-portfolio functionalities can be an effective mechanism to establish these information gathering patterns and skills of learners. Although various studies have been done internationally on so-called user education or bibliographic instruction programmes (or sometimes called 'information literacy programmes'), nothing has been reported where the information gathering patterns of a select group of learners have been empirically established within an e-portfolio system. Not only can various users access the research reports (e.g. the librarian to evaluate the quality of the references used), but online questionnaires can be posted within the system at various stages of a learner's progress with a project, with the main purpose to establish information usage during one or more of these stages.

As an introduction to this paper, various features of the e-portfolio will be addressed, such as specifications of a typical e-portfolio system, typical infrastructures (e.g. Blackboard), as well as user perceptions of e-portfolios (learners, academics and employers). Thereafter applicable models for establishing information usage patterns will be discussed briefly, in view of constructing a series of online questionnaires. As indicated above data extracted from the questionnaires will be utilised to suggest how and where to improve the information gathering skills of the learner.

Evaluation of Information Services in the Library: Areas identified by Graduate Students

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Abstract. Evaluation is the systematic assessment of the operation and/or the outcomes of a program or policy, compared to a set of explicit or implicit standards, as a means of contributing to the improvement of the program or policy (Weiss, 1998). Neal (2006), in the context of academic libraries, says that "decisions are routinely not supported by the evidence of well-designed investigations" and that "research in the field is poorly communicated, understood and applied" (quoted by Peter Hernon, in the forward to Matthews, 2007). In addition, more and more libraries are either closing down or being forced to cut down on services due to recession (Powell, 2009; Applegate, 2009). Thus, identification of different areas of library services for systematic evaluation becomes extremely imperative in the current economic scenario. In an assignment to graduate students in a Master of Science in Library and Information Science program (with most students currently working in library or archive settings), the students were asked to describe an evaluation research scenario and a

problem statement based on the scenario. An important criterion for grading was the significance of the scenario proposed. Using the areas of library (and archive) evaluation identified by the students as a case study, as well as review of recent evaluation studies, this study seeks to propose research questions and current areas of interest in the evaluation of library services. The study should shed light on the evaluation areas of importance in the current economic scenario and also help drive future research in this area.

Keywords: evaluation of library services, evaluation research scenario, graduate students, assignment, research questions

References

Weiss, C.H. (1998). *Evaluation* (Second Edition). Upper Saddle River, NJ: Prentice Hall.

Matthews, J.R. (2007). *The evaluation and measurement of library services*. Westport, CT: Libraries Unlimited.

Neal, J.G. (2006). The Research and Development Imperative in the Academic Library: Path to the Future. *Portal: Libraries and the Academy*, 6(1), 2006, 1.

Powell, K. (2009). Libraries Closing Due to Budget Cuts. *About.com: Genealogy*, September 15, 2009. Retrieved January 30, 2010, from http://genealogy.about.com/b/2009/09/15/libraries-closing-due-to-budget-cuts.htm

Applegate, L. (2009). Libraries hit hard by recession. *Chicago Parent*, October 26, 2009. Retrieved January 30, 2010, from http://www.chicagoparent.com/magazines/chicago-parent/2009-november/libraries-hit-hard-by-recession

Evaluation of the quality of the services in the libraries at the Centers of Higher Education in the province of Camagüey.

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Abstract. Exists some aspects that affect the good perform of the libraries, standing out that libraries do not act for their own satisfaction or either survive in isolation. One of the most important aspects in the atmosphere of the University Libraries is mainly, the satisfaction of the user's demand.

The present research emphasizes in the importance of the evaluation as a tool for the administrator to plan and to decide their actions. This research was carried out in the Centers of Higher Education in the province of Camagüey, by the SERVQUAL model, which identifies the difference between the expectation and the user's satisfaction with the services offered by the libraries.

Questionnaires and interviews were carried out with 300 users of the scientific community of the territory. Out of the 300 users, 260 were analyzed and the 80% of this sample answered the instrument applied.

From the analysis of the results, it is verified that the quality of the services offered by the University Libraries is very close to what it is considered as ideal by the users, however, exists some points that should be improved.

Keywords: University libraries, Quality of the Services, Evaluation of the Services

Examining Academic Library E-Learning Support for Online Learners

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Abstract. With the advent of digital courseware, online library collections, and open access, there is a critical awareness of the need to examine academic libraries and their role in e-learning in higher education. Drawing upon their online experiences, the author describes

some of the ways library instruction and reference services are embedded within graduate education courses and programs at the University of British Columbia. Over a period of two years, an embedded model of library service using course content management systems (Vista and WebCT), Wimba Live Classroom, discussion boards, email, telephone and in person delivery was utilized. The author examines the number of courses, students, and information requests; professional staffing requirements (hours, costs, skills); types of information requests, nature of course assignments and tasks; and key factors associated with the satisfaction of participants and instructors. The author discusses the benefits and drawbacks of this delivery model and implications and current trends for achieving sustainable academic library e-learning support.

Keywords: E-learning, libraries, digital library, digital reference service, content management system, distance learning, courseware federated search, education

Experimental workflow development in digitisation

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Library collections are composed of non-digitally born assets representing text, such as books, newspapers or manuscripts, where no digital version - at least with satisfying quality of searchable text - has been created so far. Setting up a workflow for the digitisation of such collections is a complex exercise that includes several processes and requires considerable hard- and software resources as well as skilled personnel.

In this abstract we present the idea of an extensible platform for digitisation of historic printed material with a focus on Optical Character Recognition (OCR). Our primary assumption is that before setting up a productive digitisation workflow, the software based processes and available components should be evaluated beforehand in order to assess the general feasibility and to identify additional resources that might be required.

The technical framework for the platform is built within the IMPACT project which is funded by the European Commission and aims to significantly improve access to text-based European cultural heritage. In order to establish interoperability between the very specific tools which are being developed in the project, IMPACT creates a set of services and workflow modules, comprising pre- and post-processing steps from image enhancement down to language correction tasks. From these fragments, more complex workflows will be developed and demonstrated by the content-holding institutions as part of the project. Albeit these workflows refer especially to the tools developed and used by IMPACT, they can also be seen as a general guideline for creating OCR related digitisation workflows.

The experimental environment used in IMPACT allows the setup and evaluation of such workflows using a wide variety of components that are made available in the framework. It provides the means for collaborative management and assessment of distributed software components with regard to their usability, quality, effectiveness, and scalability especially in terms of their aptitude within a mass digitisation project.

Keywords: Digitisation, Digital Library, OCR, Text Recognition, Workflow

References. IMPACT Project (2008-2011): Improving Access to Text. http://www.impact-project.eu

Exploring the Research Knowledge Needs of Canadian Academic Librarians
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Abstract. An important mandate adopted by academic librarians is to contribute actively to the knowledge base of their professional discipline, as well as to align themselves more centrally with the broader academic process of scholarly communication. Indeed, there is an increasing expectation that academic librarians engage in active research and scholarship for purposes of tenure, promotion, and annual performance. More recent is a nascent recognition of evidence-based decision making to advance institutional service goals; within the last decade or so, for example, major academic libraries in North America have begun participating in large-scale user assessment projects in order to enhance managerial decision-making, with LIB-QUAL being the most prominent tool in this trend. These parallel trends are converging gradually to create heightened interest in the concept of an organizational and professional culture of research and assessment, not only within individual libraries but within the broader community as well.

Nonetheless, as academic librarians take on the challenge of producing and disseminating both scholarly and applied research knowledge, and as administrators expect higher levels of research productivity and evidence-based decision making, it is important that staff research knowledge and skills be constantly and systematically developed and augmented.

However, one of the little studied questions is the extent to which they have the requisite knowledge and skills to conduct high quality research and scholarship, and what further learning they need to support such research and scholarly activities. Descriptive data on their research competencies and competency gaps are not widely reported, nor are methodologies for capturing and articulating deeper insights into their attitudes and needs.

This paper describes the outcomes of a pilot project to shed light on the current levels of research knowledge, experience, interests, competencies, and learning needs of academic librarians at one academic library institution, the University of Alberta Libraries, which serves faculty, staff, and students at one of the major research institutions in Canada. With a response rate of 68%, staff survey findings are strongly indicative; nonetheless, the attitudes and opinions of non-respondents should not be forgotten.

The ongoing strategic priorities of the University of Alberta Libraries include support and enhancement of a "culture of assessment and research" both in the operations and services provided by the institution and among the cohort of academic librarians on staff. Two examples of initiatives that advance these goals are the creation several years ago of an assessment office engaged in large-scale mission feedback research, and the recent hiring of a director of research charged with coaching and advising librarians about their research activities.

The snapshot thus produced by the pilot study sheds light on the research experiences, attitudes, and learning needs of academic librarians at the University of Alberta, and is helpful in developing a framework for educational opportunities for staff to enhance their research knowledge and skills. In the long term, it is hoped that the quality and quantity of research produced by University of Alberta librarians will be enhanced, thereby enabling them to become recognized players in the scholarly communication process, nationally and internationally.

It is also anticipated that the study reported here will serve as a research prototype and pilot for a multi-institutional, nationwide project along similar lines to capture a national snapshot of research productivity and competency found among Canadian academic librarians. Recognizing that engagement with the scholarly communication process is a core value of academic librarians across Canada, it is anticipated that the University of Alberta pilot study represents a solid springboard to the national level.

First Stages to Improve the Quality Management System in University Library

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Abstract: The quality system in libraries is the management concept consist of personal action according to require different customers' needs, quality of the librarian information service and forms.

There are used process approach in librarian process management. To create the quality management system it is necessary observe main processes in university, build technology maps (graphical model) of these processes, describe these processes as documents.

Here we discussed main librarian process, now used process approach quality management system in university library was built technology maps of such processes define which process to be improve in first stage.

Keywords: TQM, process approach, technology map, librarian process, university library

Fractal Analysis of Knowledge Organization in Digital Library

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Abstract. Visualization of the large-scale collections of information became one of the essential purpose in data analysis. The new methods of visualization are increasingly applied as a significant component in scientific research. Particularly qualitative nature of Infoviz studies (Information visualization) can be combined with quantitative character of digital libraries volumes. This paper describes and demonstrates the case of hierarchical structure visualization i.e. visual representation of both classification adopted by ACM (Association for Computing Machinery) digital library and classification universe. Given maps were processed by nonlinear graphical filters. Finally fractal dimension (FD) and derived techniques have used to analyze the patterns of clusters on the visualization maps. Quantification of output graphical representation by means of fractals makes possible to adjust visualization parameters as well as evaluate initial classification scheme and its dynamical characteristics.

Keywords: visualization, classification scheme, clustering, mapping ,fractal dimension

FRBR and OPAC Users' Views on Bibliographic Families: A Mixed Method Approach to categorization of works

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Abstract. During the development of FRBRized OPAC prototypes in recent decade it seems that the user is gradually being ignored. Users' views toward the collocation function in bibliographic families and their understanding of FRBR entities are vital for the development of OPACs. Although most of the OPAC users are not familiar with FRBR concepts and terminology, they have the ability to define and draw relations among bibliographic entities. This paper reports the process of applying quantitative and qualitative methods simultaneously in order to align users' views on bibliographic families with the FRBR's entities. It focuses on how and the extent to which each method contributed to the findings of the study. For this purpose two sets of 40 bibliographic cards which were prepared based on the FRBR model were given to 60 highly specialized professionals in fields of the "Koran" and the "Epic of Kings" for categorization. A complementary questionnaire was also distributed among these participants for measuring the importance of each FRBR entity. During each data gathering session, a semi-structured interview was conducted to gather qualitative information from the research population. The findings of this research shows that how mixing the data gathered through questionnaire and cards with the interviews lead to more realistic findings about the validity of FRBR levels of entities: works, expressions, manifestations and items.
Keywords: Mixed research method; FRBR entities; Bibliographic families; OPAC users; Users categorization of works.

From Library to Classrooms: Building Learning and Knowledge Communities from the Information Services

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Abstract. The objective of this study is to analyze the way in which libraries and its information services are involved as mediators in the learning communities and how that knowledge is constructed. The precedent of this research is a PhD project where the library is conceived as a learning community within the framework of social relations and the construction of knowledge. The type of study is analytical and descriptive. Result, after to describe the features, functions and products of libraries, we found how information skills are developed in students and how they built the tacit and explicit knowledge. From this contribution we propose a model to design the library as a Learning Community.

From quantitative and qualitative methods towards teaching methodology: Vilnius University students learning to evaluate library performance

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Public sector in Lithuania experiences the need for implementing necessary ways for validating their existence in the strongly competing environment. Library and information institutions performance measurement and evaluation is elaborating more often, linked with presure from outside, as well as from inside. There are different ideas about what evaluation is and how it can be performed. Nobody can argue that monitoring performance and performance evaluation is an integral part of good management. Different methods are used worldwide, much investigations are done. Which ones are most suitable for Lithuanian libraries?

Vilnius University Institute of LIS recognized this need and continues to *teach students* in the frame of Library and information centres management master study program (teaching subject „Library and information institutes performance measurement and evaluation"), as specialists with the sort of knowledge and skills which are requested more strongly than earlier. Students overall involvement in exploration of the subject is important.

The *purpose* of the paper is to share some experience about how methods of library performance evaluation from the view of teaching methodology at university level works.

Methodological tool and basis for research is international standard *Library performance indicators*. It is used as evaluation method for this research. Research was carried out by master students at the Vilnius University library, as practical task with purpose to test the method (library performance indicators) and explore the model of applying the method as well as to gain certain knowledge and experience on evaluation of library performance for future specialists. Additional methods, as literature analysis, benchmarking, observation, statistical calculations, simulation were used in the process too.

In the course of this work certain findings were received, indicating the appropriate level of suitability and possibilities for applying the method of library performance evaluation in Lithuanian libraries, as well as affirmation the validity of the method for students teaching way.

From traditional to futuristic libraries: Will we go a full circle and want to be traditional again?
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Abstract: In a September 2009 piece at cnn.com, John Sutter (Sutter, 2009) announced that "the stereotypical library is dying – and it's taking its shushing ladies, dank smell and endless shelves of books with it", and that libraries were trying to define their future – with or without books. Alluding to increased digitization of books, lack of funding and a generation that would rather spend time on Facebook, Digg or Twitter, Sutter paints a bleak future for the traditional library. In an earlier 2005 report by the Loyola University of Chicago Libraries (Loyola University, 2005), the authors had made important recommendations about changes for the future which apply not just to the library at Loyola University but to libraries across the United States in general. However, similar voices of doom were raised when more and more people started using the Internet. Already, there is an increasing pool of companies that are crying hoarse over losing productivity due to employees spending time on Facebook and people trying to keep away from the Internet. Robert Pattinson, British actor, says "(The internet) feeds the worst part of your soul. When you have nothing to do and you go on, when

you're too tired to read a book, I'll read the news, you go on to the New York Times, you get bored and go on IMDb. Then you realize how pathetic you are. I have to delete my history (of visited websites)" (Celebrity Mania, 2009). While the increasing calls and the need for libraries to change and evolve is not unfounded, uninhibited change may put into question some of the very reasons and purposes of the existence of libraries. Using the case of the internet, its adoption and its avoidance, this article will argue that while many will join in hordes to welcome the libraries of the future, we may just come a full circle with patrons wishing to go the traditional route again. With an analysis of the dichotomy and the inherent contradictions between the traditional and the futuristic, this article hopes to make a case for calibrated change by libraries, while preserving some of the salient reasons for the founding and usage of libraries.

Keywords: future of libraries, internet, change, traditional libraries

References.

Celebrity Mania (2009). Robert Pattinson Wants to Stay Away From Internet, Celebrity Mania, Retrieved January 29, 2009 from http://www.celebrity-mania.com/news/view/00008556.html

Loyola University (2005) Charting the Future: A Report on the Future of Loyola University of Chicago Libraries, November 2005, *Loyola University, Chicago*. Retrieved January 28, 2010 from http://library.luhs.org/hslibrary/about_us/publications/Final-White%20Paper.pdf

Sutter, J.D. (2009). The future of libraries, with or without books. *cnn.com | technology*, September 4, 2009. Retrieved January 29, 2010 from http://www.cnn.com/2009/TECH/09/04/future.library.technology/index.html

A General Overview to the International Landslide Literature for the Period of 1945-2008

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Abstract. The purpose of the present study is to analyse the international landslide literature for the period of 1945-2008. In fact, the landslide is perhaps one of the most complex natural phenomena. Moreover, owing to landslides, a vast amount of loss of lives and serious economic losses are encountered throughout the world. For this reason, a vast amount of landslide papers is published in the international journals in every year. For the assessment of the international landslide literature, the Science Citation Index Expanded (WOS; Web of Science) published by Institute of Scientific Information (now Thomson Scientific), USA for the period 1945–2008, is considered. A total of 3468 publications are found and this data is stored into Oracle XE database and queried by using Structured Query Language, SQL and Procedural Language/Structured Query Language, PL/SQL. In the following stages, some statistical analyses are performed and the possible trends are discussed. While in the period of 1945-1974, the annual average number of publication about landslide is only one, after 1987, a sharp increase exists to present, and the annual average landslide publication is about 150. A total of 4898 key words were used in the articles. Normally, the mostly used keywords are landslide and debris flows. The other most frequently used key words are landslide hazard, GIS, slope stability, rock fall, earthquake and landslide susceptibility. Another interesting result is observed on the numbers of author per publication. In the first period (1945-1966), almost all papers were written by single author. However, actually, the number of authors per publication is about 3. This result shows the importance of team works and multidisciplinary studies. In the last stage of the study, the most cited papers are evaluated. The papers published in "Water Resources Researches" and "Earth Surface Processes and Landforms" are generally mostly cited. These publications contribute the increase of the impact factor of journal. As a conclusion, in the near future, the other innovative researches about the landslides may be observed. These researches are the assessment of landslide risk, prediction

of runout and time of landslides and early warning systems. To reach such type purposes, the anatomy and mechanisms of the landslides should be clearly known. For this reason, the studies on the landslide evolution may increase.

Generational Technology Expectations of Library Users: A Case Study
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Abstract: In order to more fully understand the cultural shifts in technology within and between generations, a sample survey of several public libraries in a rural university community will be analyzed. The following subjects will be addressed and compared on a generational level within this poster presentation: programming, technology—types and usage, and frequency and purpose of visits. A thorough analysis of the data in this case study will provide insight into the changing role of technology use among two distinct generations of library patrons.

Greek academic repositories: Policies (?) for making available scientific and cultural content
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Abstract. Most Greek academic institutions have in our days implemented and put into productive operation depositories for the registration, promotion and preservation of scientific / intellectual work produced in them. Many of them also operate digital repositories that contain various cultural material. The vast majority of them make use of open source repository systems, and have adopted open access policies for the disposal of the contained material to the global public through the Internet. This paper surveys the current situation with respect to systems used, interoperability standards and policies adapted, with a view to the visibility of the contained material, examining if and how the need for making available Greek material to the general public is served by recent developments regarding IRs and open access in Greece.

A grounded analysis of the use of public libraries in Appalachia by non-residents
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Abstract: Because of municipal, state, and federal budget constraints, public libraries increasingly need to demonstrate their value to their communities. They often provide evidence of the demand for and use of services by their tax-paying residents. This project explores the use of public libraries by non-residents and how public library directors perceive the value of non-resident use for their libraries and communities. In-depth interviews were conducted with nineteen library directors throughout the Appalachian region of the eastern United States. A grounded analysis of these interviews using NVivo 8 software reveals a variety of non-resident user types, attitudes and approaches to offering services to non-resident users, and strategies for justifying these services to resident taxpayers and their representative bodies. The full analysis will provide a framework within which to further investigate the relationship between non-residents, public libraries and the community business sector.
Keywords: Public libraries, Evaluation of library use, Non-resident use

Heuristics for the evaluation of library online catalogues
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Abstract. Under the growing popularity of new search paradigms (e.g. faceted search) and modern web technologies many libraries have integrated new interaction possibilities into their websites. In particular the online catalogues of libraries have become more dynamic and interactive than ever before. But up to now there is a lack of empirical evidence which of these new components really deliver an added value for the users and especially it is not entirely clear how these elements should be designed and integrated into library websites. These new concepts impose not only new challenges for the implementation of library websites but also for usability evaluations of these sites. A very common instrument to assess the quality of web interfaces is the so called heuristic evaluation. However evaluation criteria, like for example the 10 heuristics of Nielsen are too generic for an in-detail analysis of certain components. Within the project "E-lib.ch – Swiss Electronic Library" a modular list of criteria was elaborated, which allows considering the particular aspects of online catalogues and which can also be used for self-evaluations by the library staff.
Keywords: library online catalogue, usability evaluation, quality assurance
Reference E-lib.ch – Swiss Electronic Library (http://www.e-lib.ch/index_e.html)

How to teach library management?
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Abstract. Quality of library services is in fact the goal of a good library management. We present the method of teaching and how to do library management and practical approach using some strategical models for Information Science students in Library management course at Transilvania University of Brasov, Romania.
In this paper we try to present Christin Abbot strategic model and Deming Weel scheme in libraries- PDCA (plan- do-check-act) like methods to approach strategic plans to improve different services in the library.
After theoretical presentation the students do strategic plans working in teams. They are in double perspective: as users and as managers wanted to improve library services. The students are taught to use statistical methods to interpretative data.

We will present the pedagogical method and the students conclusion, the very inventive strategic plans proposed by Transilvania university of Brasov, Romania students in Information Science field.

Keywords: library management, pedagogical aspects, strategic plans, statistical methods.

ICTs Applications in Libraries in Developing Countries

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Abstract: This paper explores the information and communication technologies (ICTs) applications especially the availability of hardware, Internet connectivity, website, status of automation, software used and problems regarding ICTs applications in medical libraries. It is based on the survey of medical libraries of Lahore. It presents the quantitative and qualitative analysis of data and finds the low level of ICTs applications especially the lack of hardware facilities. Findings also include partial automation, absence of standardized software for automation, absence of website, financial limitations, lack of cooperation from higher authorities and few training facilities for librarians working in medical libraries. Access to digital resources and Internet connectivity are the most positive features. The study will help in improving the level of ICTs applications in medical libraries of Lahore in particular and medical libraries of developing countries in general.

Keywords: Information and Communication Technologies, ICTs, Library Automation, Medical Libraries, Health Care Professionals, Lahore, Pakistan, Developing Countries.

Implementation Open Source Content Management Systems in libraries websites

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Abstract. The need to provide the most relevant information in a timely and easily digestible manner is more important than ever. Information professionals are constantly seeking new ways to reach users and turn the astounding amount of information available into a usable form for the clients of their libraries. Content Management Systems provide the tools to link technology with information, and will play an increasingly important role in the web presence of libraries. A content management system offers a way to manage large amounts of web-based information that escapes the burden of coding all of the information into each page in HTML by hand. In CMS the technical skill required to author a guide is very low but the cost to purchase a commercial CMS application is very high. An alternative to commercial CMS, open source solutions are a tantalizing option. This paper shows that open source CM systems can be a flexible, scalable and cost-effective alternative to closed source solutions. This paper inform LIS professionals about the benefits of using Open Source Content Management System Softwares in design library website and showed that open source CM systems can be a flexible, scalable and cost-effective alternative to closed source solutions. However, Libraries must to consider a few things before deciding on a product.

Keywords: Content Management System, Open Source Software, Library websites, Libraries.

Improving Student Academic Performance through Library Instruction
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Abstract. Information Literacy and library instruction play an important role in supporting student academic success and build partnerships among academic departments and the library. This paper outlines the strategic directions of a four-year specialized college library in developing and implementing a library instruction program that supports a specialized academic curriculum. The study provides an overview of the Stephen B. Luce Library's instructional program and assessment methodologies for measuring student learning outcomes at SUNY Maritime College. In addition, it demonstrates pedagogical techniques for integrating library's resources through course lectures, course design.
The Information Literacy sessions are carefully designed to incorporate the Association of College and Research Libraries (ACRL) standards as they are observed in institutions of higher education in the United States. The empirical data from pre/post tests reveals the effectiveness of the library's information literacy program and demonstrates improvement in student academic performance
Keywords: Information literacy, assessment, student learning outcomes, academic success, course integrating resources, acrl standards

In the middle way toward success: intermediate impact assessment results of public access computing in Lithuania
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Abstract. Since 2008 Lithuania in partnership with the Bill and Melinda Gates Foundation Global Libraries initiative is implementing large scale public access computing project "Libraries for Innovation". The implementation of the project includes installation of computers and Internet in public libraries as well as related activities, such as training, technical support, promotion, advocacy and outreach, impact planning and assessment, and the creation of, and improving access to, locally relevant content. To measure the progress toward this goal an impac assessment framework has been developed. This paper describes the methodology of the framework and gives an overview of the impact assessment intermediate results as well as shows their use for course corrections and advocacy activities.
The research covers a wide variety of target groups such as librarians, library managers, users of library public access computing and the general public. The study looks at downstream impacts of public access computing in the areas of education, culture and leisure, health, communication, economic activities and electronic governance.
Findings from intermediate study shows clear changes in public access computing infrastructure in public libraries and in skills of library staff as well as user activities and perceptions of social and economic benefits received.
A representative sampling of conducted surveys allows the conclusions to be generalized and applied to all target groups. It is the first time that the impact assessment of this scope has been performed at libraries in Lithuania. It allowed us not only to make the conclusions, but also to test the developed methodology. In the future, the methodology could be applied for impact assessment of other library services.
The study contributes to a global discussion of the question: how to measure the impact of libraries? However, answers to this question are not yet well known. Thus, this research deals with the topic that does not have a clearly defined consensus. Yet by providing practical

examples the study demonstrates one of the ways in which librarians can attempt to assess the impact of their services.

Information barriers in libraries – types, typologies and polish empirical studies
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Abstract. The paper presents the universal typology of information barriers based on Wilson's intervening variables. There are presented other typologies of barriers in libraries as well, among others connected with library anxiety phenomenon. The aim of the paper is to describe the polish empirical studies of information barriers and library anxiety, which are conducted by the author of this paper from several years. The focus is to highlight – relating to information barriers - universal issues e.g. relation between demographic variables (sex, age, discipline etc.) and barriers perceiving, and – relating to library anxiety – a new component of the phenomena, resource anxiety.
Keywords: information barriers, access to information, barriers, library anxiety, resource anxiety

Innovation: A key to success in the knowledge driven society
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Abstract: Innovation is the core of the knowledge economy society. The information explosion and technology explosion have brought major changes to libraries in the way they collect, organize, process, store and retrieve information. Today our libraries are in the process of re-inventing and adapting the new challenges and opportunities developed by the changing needs of the users due to the technological advancements. Libraries are now trying to become flexible as per the requirement of the users and the shape of libraries is varying from physical to virtual. Thus they have to shift their role from collection to connection. They have to develop the environment of innovation and work towards dissemination and conversion of knowledge. In the knowledge economy era, libraries will carry out researches on development and application of customized information resources, construction of virtual libraries, and protection of intellectual property thus founding the base for knowledge innovation. Innovation is closely aligned with two other forms of transformation – creativity and change. Since these terms are often used interchangeably, it's important to distinguish between them. Creativity is the purposeful activity, or set of activities, that produces valuable products, services, processes or ideas that are better and new. Change is the altered state of an individual or organizations produced by both purposeful and unintentional transformational forces. Innovation is the intentional development of products, services, processes or expressions such as Info Watches, Abstracting Services etc which are created to support the organizational vision, mission and values. So, we must not **focus on** knowing how but on **knowing why** and **knowing what** as well and based on that we have to create new model of library services where we can innovate to create value added services based in new processes.

International Business Faculty/Library Collaborations to Improve Student Learning Outcomes
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Abstract. The presenters (one faculty member and two librarians) will share their experience in growing a library instruction program from one that included course-related instruction for international business students to one that integrates information literacy into the International Business Program. Through faculty collaboration, the library's liaison to the School of Business and the Assistant Director of Library Outreach Services identified core information literacy learning outcomes for target international business classes and developed a library presentation that could be used as a stand-alone or used as smaller units to meet course goals and assignments. The library presentations are tied to course assignments that ask students to use relevant databases as well as print and electronic reference and monograph resources. Each class has a "signature" assignment with information literacy skills scaffold to ensure student success.

Information literacy course learning outcomes have been added to the course syllabi and are planned to be part of the program review and assessment process where they are scheduled to be benchmarked in 2010. Students are asked to take a pre-assessment at the beginning of their program and another assessment at the close of their program. Additionally, student capstone projects are reviewed to identify use of key resources.

In addition to the overview of the collaboration, the presenters will provide an literature review of international business instruction and the preliminary results from their learning outcome assessment study.

Investigation of IT Training Courses for librarians and Information Experts at University Libraries of Kerman Province
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Abstract. The present research was conducted to study the status of training courses passed on information technology by academic librarians in Kerman. Descriptive survey method was used for the study and required data were collected by means of a questionnaire. The research population included academic librarians of three universities in Kerman province. The collected data were analyzed by SPSS software. Results of the study revealed that the majority of librarians have participated in related training courses especially the internet course. The most serious difficulty in using information technologies in surveyed libraries is the lack of educated librarian.
Keywords: Academic libraries, Information technology, Librarians, Information specialists, Training courses, Iran, Kerman

The knowledge society in the health
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Abstract. In general which is the repercussion the new technologies in the heath services and the evolution the heath care in the world since to the incorporated the TIC.
KeyWords: health and knowledge society, TIC and medical services, TIC and health

Libraries and Learning Management Systems: Peaceful Co-existence or Vital Necessity?

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Abstract. Understanding the importance of building repository of teaching materials required for the productivity improvement of the education system, found on libraries and their collections, involves understanding of the impact of particular educational practice on the intellectual capital accumulation process of the University. Especially interesting is the direct and indirect impact of e-learning to the development of human capital in circumstances where the use of e-learning at the university level in the Republic of Croatia shows tendency of growth. The idea of the article is to show what are the specific limitations of the e-learning practice and implementation in Croatia: access to individual collections of educational material (created by teachers and available only in their digital, online form), which makes them available only to a limited number of users; production of educational content for e-learning within individual isolated systems that are not available outside of certain institutions/universities, which results in unnecessary repetition and low efficiency at the level of education system as a whole. In this paper we will attempt to analyze the existing situation at the Faculty of Humanities and Social Sciences, University of Zagreb, Croatia with special emphasis on the e-learning materials and "real" library collections. We will also try to answer questions about the role of digital libraries (and their collections) in learning management systems (LMS) and library's supporting role in the field of e-learning environment. This paper raises the question of how virtual, online educational environment has changed the library itself, business and management of the collections themselves and the specific tasks of librarians.
Keywords: Library 2.0, e-learning, library service, user satisfaction, LMS

Libraries in changed information space

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Abstract. Advancement of ICT significantly changes educational environment influencing therewith academic libraries traditionally centers of educational process and keepers and providers of data, information and knowledge. These changes posed necessary transformation in library space and management process in order to respond to the demands of changed educational process. Authors try to give insight into the adaptation to the changes of both faculty and library, focusing on the harmonization with bologna process (ECTS), developmental strategies, faculty's intellectual capital adaptation to production in digital space and academic libraries coping with production and usage of digital materials. Analysis of print and digital materials usage in courses offered via faculty's learning management system will be done to support the discussion on library's adaptation to the changed information space, predictions on duration of the transformation process and presuming advantages and problems emerging due to acceptance of technological advancements. Aim of the research is to find out has today's libraries, originally based on printed materials, have adapted their management and services to transformed education and information space as

well as are they capable to respond to the demands of educational process in digital environment.

Library and Information Science Research in India, UK and USA Abstracts

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Abstract. This study analyzed the journal articles and research papers in six library and information science journals published in the year 2008 from U.K and U.S.A. The purpose of the analysis was to collect information relating to current subject trends and type of articles published in the LIS field. Project of this type, done for different years, would provide valuable information concerning the nature of research in librarianship and its development. Data was collected from 165 research papers and non research articles. Findings indicate that 93 (56.36%) of the articles out of the total 165 were research based. The variation is found with regard to coverage of core subject areas published from U.K and U.S.A.

Library Leadership Development: assessment, antecedents and development of Individually Considering, Intellectually Stimulating, Contingently Rewarding, Extra Effort Inspiring, Leading by Exception (Active), Idealized Influence (Attributed), Inspirationally Motivating, and Effective Leadership Performances

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Abstract. This research focuses on library leadership development. It introduces theory on triads of typical-maximal-ideal (a) individually consideration, (b) intellectually stimulating, (c) contingently rewarding, (d) extra effort inspiring, (e) leading by exception (active), (f) idealized influence (attributed), (g) inspirationally motivating, and (h) effective leadership performances (for example via triad of typical, maximal, and ideal effective leadership performances) adding diversification and precision to leadership assessment. It explores the proposition that within each triad - each of typical, maximal, and ideal leadership performances is theoretically and conceptually distinct and supports this distinction through data based empirical analyses by using mean difference via one sample t-test and one way analysis of variance. Thereafter, it uses each triad of the distinct typical, maximal, and ideal leadership performances to introduce and empirically test the mechanism to quantify respondents' intrinsic desire and inherent potential to enhance their respective leadership performances. Finally, it suggests precedents of each leadership performance and presents implications for leadership development training on the basis of correlations and multiple regression analyses.

Library Network Support Services: quantitative and qualitative measures for assessing the impact of information literacy initiatives on learners.

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Abstract. Significant work is being done by many international organisations to -measure the information society- (UNESCO 2008). Recent developments have seen an interest in quantitative and qualitative measures in the field of information literacy now widely considered the trademark pedagogy of librarians (Kapitzke 2003 cited in Montiel-Overall 2007). International frameworks for assessing information literacy through which positive developments at both international and national levels can be demonstrated and future efforts can be better focused are being identified. This article reports on the Library Network Support Services (LNSS) project- a collaboration to implement and champion online information literacy initiatives across a consortium consisting of a university, a teacher education institution and two Institutes of Technology in the Republic of Ireland. The paper describes the origin and development of the LNSS, deals with the growing importance of information literacy- in the Republic of Ireland and internationally. We will describe the process and methodology for implementing online information literacy initiatives including information literacy teaching across the consortium and also suggest possibilities for measuring the impact of information literacy initiatives on learners for the development of knowledge societies.
References. Catts, R and Lau, J (2008). Towards Information Literacy Indicators. UNESCO; Paris. Available at http://unesdoc.unesco.org/images/0015/001587/158723e.pdf (accessed 12-12-2009)
Montiel Overall, P. (2007). Information literacy: toward a cultural model. Canadian Journal of Information and Library Science 31(1): pp. 43-68.

Library Research Support at the University of the Witwatersrand (Wits): Signals from Local and International Performance Measurement Programs

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Abstract. The University of the Witwatersrand seeks to improve research productivity and research student output and to be ranked among the top 100 universities in the world by 2022.The Wits strategy and international universities ranking criteria are not specific on library standards required to support this goal. Using LibQUAL+ 2008 results and related Wits surveys data, the paper compares Wits Library with a sample of the top 100 peer university libraries in order to clarify optimum levels of library research support. It is argued that although Wits inputs compared well with peer libraries, the quality of library services did not meet minimum user expectations. Access and staffing quality consistently posed challenges. Insufficient information literacy skills, librarians' limited subject knowledge and national interlibrary loan arrangements contributed to perceptions of poor library service quality at Wits. The paper concludes that: continuous improvement requires regular benchmarking with top 100 university libraries; future LibQUAL comparisons should sufficiently capture undergraduate and postgraduate opinions; and, comprehensive outputs data from peer libraries is essential to a more exhaustive comparison.

The Longitudinal Relationship of Electronic Reference to the Development of Distance Education Programs

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Abstract. This study uses data from the U.S. National Center of Educational Statistics' IPEDS (Integrated Postsecondary Education Data System) and ALS (Academic Libraries Survey) over a ten-year period to connect the adoption of electronic reference services to the development of distance learning at those same institutions. The statistical analysis shows trends in electronic reference services, both those that were crein response to specific distance education needs and those that developed simply as a technological modification of a traditional service. Showing how these services developed in the past may provide insight for the development of future reference services.

Management of Electronic Records in Iran

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Abstract. The management of electronic records demands a new approach to traditional archival principles and practices, as well as the development of new skills. If archivists and records managers are to manage electronic records, they must acquaint themselves with the computer and associated telecommunications technologies.. A new approach to life cycle management must be developed in order to accommodate electronic records. It is vital that the organisation, its environment and management are studied in order to determine how computer applications affect organisational structures and management cultures. The archivists and records managers must be involved in the design and implementation of information systems so that their requirements are taken into account at this early stage. It is also necessary to investigate the use of information technology in information processing, retrieval and storage. In this research we examine this situation in Iran.
Keywords: management, electronic resource.

Management of Integrated Systems for Digital Information Processing Using Biomimetic Structures

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Abstract. This paper presents a new principle for the structuring of integrated systems wich may used in organizing the institutional repositories (IR) at the level of university consortium and in improving the management of digital information.
The new principle is based on the imitations of the most performant biologic structures. The structural particularity of most of them systems is the arborescent organization, nonlinear and complementary double structures like in the case of DNA, of the kydneys, the lungs, etc.
The structures suggested in the present paper provides the highest rate of information transfer and highly qualitative management, is the one wich imitates the arborescent structure of the lungs.
The aim of the paper is to prove that the use of biologic structures, validated in time as regards their functional stability, in the development of same complex integrated systems for the processing of digital information is a way to optimize the quality performance of the technical systems and to ensure a qualitative management.
The validity of the methods suggested in this paper is demonstrated by means of methods specific to the fractals and constructal theories.

The Manhattan Project at Oak Ridge: Westcott Images, 1942 - 1946
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Abstract: The purpose of this study is to document and analyze Westcott narratives related to his historic images of the Manhattan Project at Oak Ridge, Tennessee, in order to provide historical background and context to the Westcott images. In the role of official photographer of the "Secret City" (Oak Ridge, Tennessee) during World War II, Westcott captured images related to both military and civilian history and culture. Thousands of these images have been archived in various repositories and many have been published in historical literature although Westcott is not always credited as the photographer.

Mapping the Structure and Evolution of Qualitative and Quantitative Methods in Library and Information Science
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Abstract: Research is of great importance for any scientific field. Library and information science (LIS) is no exception. The use of both quantitative and qualitative methods in LIS research appears to have increased in recent years. This paper attempts to chart the evolution of qualitative and quantitative methods in LIS over the last 29 years using CiteSpace, an information visualization tool. It maps the intellectual structure of qualitative and quantitative methods in LIS based on articles that appeared in professional literature on the subject between 1980 and 2009. Using bibliometric and co-citation analyses, co-citation, co-word and author co-citation patterns of papers are visualized through a number of co-citation maps. Maps show the major research strands and hot topics and would improve our understanding of the qualitative and quantitative methods in LIS.

The MARC-ISO19115 Metadata Crosswalk to the publishing of Cartographic Heritage through Spatial Data Infrastructures
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Abstract. The initiatives and projects in the field of historical Digital Map Libraries (DML) have greatly increased in the last few years. Most of them aim to provide access to old maps through geoportals that allow access to thousands of maps stored in the cartographic collections of different libraries and archives. The achieved progress is remarkable, since these geoportals are providing remote access capability to resources, through optimised searches, which until now were difficult to access. However, maps catalogued in libraries have been usually described according to generic bibliographic metadata schemata such as the MARC standards (MARC21, USMARC, IBERMARC…) and they are not always comprehensible by traditional geoportals and Spatial Data Infrastructures (SDI) in conformance to geographic standards such as the ISO 19115 metadata profile. Undertaking the massive publication of historical cartography in the Internet via SDI entails securing a crosswalk between the MARC21 and the ISO 19115 format. The research challenge remains in developing metadata crosswalks based on semantic interoperability among several standards and different domains. Nowadays, most of the previous works only provides a table containing the relationships among the standards. This paper aims at describing a multi-institutional initiative leaded by the Higher Geographical Council of Spain to design and implement this crosswalk, by getting rid of the use of some successive chains between crosswalks since an excessive loss of information may occur along the different steps.   This is the first goal achieved by the formal Spanish Working Group on Cartographic Heritage in the SDI, that it is interested in promoting and facilitating the publication of cartographic documentation through SDI.
Keywords: Metadata, MARC, Cartographic Heritage, SDI, Digital Map Library.

Marketing of library resources and service: a case study of Central Universities in India
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Abstract. This article explores the trend of marketing activities in Indian university libraries with special reference to the Central Universities, fully funded by the University Grants Commission, Government of India. India is a developing country and fully depends on the intellectual manpower of the academic communities. Government is investing lot of money to the academic institutes to develop the higher education and research activities. Almost every university is getting sufficient fund and also spending lot of money for purchase of books, journals, online database and infrastructure development of its library. Due to huge increase in subscription cost and over expenditure of library purchase, Indian government setup many consortiums which resulted in minimizing the individual library burden. In-spite of this problems like devaluation of rupee against foreign currencies has compelled these libraries to make a cut in the number of journals year after year to overcome the problems these libraries are facing, the only best solution is to think of aggressive marketing of their products and services. The study was conducted to identify the trend of marketing activities in the Central university libraries. Twenty questions were asked to the Librarians regarding whether and how they are marketing? And method of marketing etc.. And the another survey made to the user community of the university like students , research scholar and faculty members regarding whether and how they are aware of the library resources and service in the campus. The result of these surveys were analyzed and found that marketing is still in the infant stage and no proper marketing activities are undertaken in these libraries. Most of the library users are not aware the library holdings and they allege the library professionals for not informing

the users through awareness service. Based on the analysis the paper suggests the library professionals about marketing in library services, marketing techniques and marketing plans to overcome the above problems of the Indian university libraries and other libraries too.

Marketing, Public Relations and Outreach: Promoting Your Academic Library
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Abstract. This session will discuss some ideas used in our university library to gain visibility throughout campus, promote the library as a 'hub' of the university, and create positive public relations. Ideas discussed include creating special events such as a 'stress-free zone' during exams; the use of screensavers in the library to advertise hours, services and events in addition to more traditional signage; various forms of e-reference, including text; ensuring regular articles in campus newspapers; special programming for First Nations students; and more. The basic concepts of marketing, public relations, and outreach applied to libraries, as found in the literature, are discussed. 'Best practices' and ideas used at other institutions are presented, as well as a bibliography of useful books and articles on the subject.
Keywords: marketing; public relations; outreach; academic libraries.

Match graphical databases' user interface with Ellis's information seeking behavior model: a qualitative approach
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Abstract. User interface acts as a bridge between the user and the information system. Its main aim is to help and guide users through an efficient interaction with the system. Information seeking behavior of the user is the most important issue that can make better the use of databases. Therefore, it is necessary to design database interface based on information seeking characteristics in order to improve the interface. The aim of this research was to identify the important elements and features as well as the strength and weaknesses in the interface of the databases.
This research examined the user interface of Ebsco, Proquest, Emerald and Science Direct databases using the main features of Ellis' Model of information seeking behavior based on heuristic evaluation. According to this method professional users observed five database user interfaces in order to see if there was a relationship between database user interfaces with Ellis' features model. The tools are used to collect data of this research are checklist and observation. Findings showed that interface designers employed rarely these elements on the user interface structure. Some of the features of Ellis' Model, such as starting, chaining and differentiating tasks were found on these databases. However, other elements of this model such as browsing, monitoring and extracting tasks were not supported by these databases. Findings also showed that the degree of match between user interfaces of the databases with Ellis's model is at average. This study recommends that taking information seeking behaviour into consideration improves the user interfaces and helps users to access relevant information.
Keywords: User interface, information seeking behaviour, Database interface, Ellis's model

Measuring Comparative Value through Conjoint Analysis: A Look at Article Characteristics
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Abstract. Establishing the value of information goods and services can be problematic (Bates, 1988), Information goods often encompass multiple characteristics of differing value to different potential users. For example, scholarly literature reading has been the subject of much research and the massive literature has been extensively reviewed in several sources (Friedlander and Bessette 2003; Rowlands 2007; Tenopir and King 2000). Several important studies (King, et al. 2009; Tenopir et al. 2009; Mabe and Amin 2002) have measured reading patterns of scholars, including the number of readings of scholarly articles, as well as time spent reading and how each relate to various demographic characteristics of readers. As research indicates a growing shift from -a journal economy to an article economy- (Rowlands 2007, Tenopir, et al. 2003), the need to shift from an identification of meaningful attributes (Tenopir and King, 2000), to a consideration of relative comparative value becomes critical.
One limit of previous research has been the tendency to examine potential attributes and characteristics singly, or in simple comparisons. This has limited the ability to interpret their relative importance and value within the full context of user evaluations. Conjoint analysis is a statistical technique widely used in market research to identify and measure the relative value of multiple product attributes. Because of its success at predicting consumer behavior (Green and Wind 1975; Green, Kreiger, and Wind 2001), it has been rapidly adopted by researchers throughout the world (Wittink and Cattin 1989; Wittink, Vriens, and Burhenne 1994). Today, it is the method of choice for the complex task of analyzing trade-offs in consumer preferences among multiple factors and attributes (Green, Kreiger, and Wind 2001). To date, only a handful of studies in the field of information science have made use of this method. Ramsing and Wish (1982) advocated the use of conjoint analysis, expecting it -to prove itself as a powerful tool for determining what library users value-; however, early approaches were costly in terms of data collection and difficult to analyze. Limited pilot studies (Halperin and Strazdon, 1980; Griffiths and King, 1991, 1993; Crawford, 1994; Landrum, 1995) demonstrated the potential utility of conjoint analysis. More recently, more complete conjoint analyses were performed (Decker and Hermelbracht, 2006; Hermelbracht and Koeper, 2006; Beckett and Inger, 2006) have proven useful in estimating the relative value of sets of library services and the factors used in journal acquisition decisions.
This paper will report on the adaptation and use of conjoint analysis in a study of the relative value of academic article characteristics that scholars use to make reading choices. The focus will be on methodological issues and results experienced in this ongoing research study.
Key Words: Information value, methods, conjoint analysis

Measuring ICT Skills: Perspectives of Employers, Teaching staff and Students in Kuwait

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Abstract: In Kuwait, and elsewhere, developments in electronic information resources have led to the demand for employees with Information and Communication Technology (ICT) skills especially in information handling institutions. There is, therefore, a need to prepare the students for this workplace. As a result, the ICT skills of current Library and Information Science (LIS) students; the needs of employers and the LIS curriculum in Kuwait were explored. In addition the factors that had an impact on students' ICT skills were investigated.

Key Words: Kuwait, Information and Communication Technology, LIS

curriculum, job market, Employers, teaching staff and LIS students.

Measuring Library User Expectations over User Satisfaction

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Abstract: The Stephen B Luce Library of Maritime College sought direct input from the library users by administering a user survey. The purpose of the survey was to solicit user-satisfaction and user approval in comparison to user-expectations. The survey was administered to the entire college community (students, faculty and staff). Library users were asked to measure their level of approval against their level of expectations in the areas of library facilities, library collections, customer service, and library technology and library information literature. The Stephen B Luce Library case study demonstrates how the survey served as an instrument for preparing the Library for re-accreditation and benchmarking against peer institutions. In addition, the case study demonstrates how the Library was able to leverage the data from the survey in order to improve the level of services, print and electronic resources, technology infrastructure, and capital improvements.
Keywords: user surveys, SUNY Maritime College, library user satisfaction, re-accreditation, benchmarking

Mental Models of Federated Searching: Qualitative Analysis and Coding of Drawings by Librarians and Students
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Abstract: In this study, we report a qualitative investigation of users' understanding of MetaLib Combined Search (MCS), a federated searching system implemented for the Washington Research Library Consortium (WRLC). Through a survey instrument, librarians and students reported their experience, usage, and opinions of the system. In response to questions about a search simulation included in the questionnaire, participants described and illustrated their understanding of MCS operation by creating a picture. A coding scheme was developed based on a chart drawn by a WRLC Metalib/SFX Expert. Three primary coders were involved in coding of all drawings. After the coding was completed, a fourth judge was invited to code those nodes (elements in the chart) and links (processes in the chart) that the primary coders disagreed on. The qualitative analysis of the charts went through several stages, including node analysis and link analysis, as well as evaluation analysis of the chart quality. Results show that librarian participants included a significantly higher number of nodes, such as "MetaLib Combined Search," "SFX menu," "OPAC" and "ISSN," in their charts than student participants did. With regard to the processes of MetaLib Combined Search, a significantly higher number of librarians included links of "metalib-database," "database-result (recordview)," "result-findit," "findit-SFXmenu," "SFXgo-OPAC" in their drawings. For each chart, the three primary judges also gave their subjective assessment of the quality of the chart based on the criteria of accuracy, clarity, completeness, and overall impression. Significant differences were found among judges' assessment scores between librarians' drawings and students' drawings on all four attributes (accuracy, clarity, completeness, and overall). Librarians' charts and descriptions were perceived to have significantly higher ratings in quality than those of students. The inter-judge agreement ratios for the three primary coders' coding results were 83% (for nodes) and 73% (for links), and

84% for re-coding of the disagreed elements after the fourth judge coded. The results show very distinctive gaps in users' knowledge of federated searching mechanisms, and thus provide good hints for library instruction and user education on searching federated search tools and using link resolvers to obtain fulltexts. The results could also be helpful to system developers in redesigning their search and discovery tools to enable the bridging of gaps in users' knowledge on federated searching. The qualitative data analysis procedure developed for this study serves as a good example of qualitative content analysis of non-text datasets.

Keywords: Federated searching; MetaLib Combined Search; SFX Link Resolver; Coding Scheme of User Charts; Nodes and Links; Gap Analysis of Perceptions between Librarians and Users; Inter-judge Agreements; Qualitative Content Analysis

Methodology for the Evaluation of E- Journals use in Academic Libraries based in statistics given by Providers.
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The aim of the paper will be to share a methodology for the evaluation of the use of e-journals based in statistics:

Data Collection

Figures for the use of journals are calculated on the basis of two sources of data provided by publishers. One source was the files recording overall use over time of all the publications available through the publishers' portals. The other was the files with detailed information by title.

Value indicators:
- Data on overall downloads of articles by institution and year.
- Data on individual titles by supplier and institution.

Data Processing and Analysis

The analysis was organized in two blocks of information:

a) Data on overall downloads of articles by institution and year.
- Articles downloaded by each institution each year.
- The ratio between articles downloaded and teaching and research staff of each institution.

b) Data on individual titles used by supplier and institution.
- Titles subscribed to, by supplier and institution.
- Titles used, by supplier and institution.
- Core titles, by supplier and institution.
- Spread and concentration of use, by supplier and institution.

The threshold used in establishing core titles was ten or more downloads. The relationship between titles used and titles subscribe to yields the spread rate for a given distributor. The ratio between core titles and titles used gives the usage concentration rate.

c) Overview of the titles most often consulted in the group of institutions.
- Core titles.
- Relevance of publications (Impact Factor).
- Subjects (ULRICH).

Moving from the Behind Desk and Into The Flow: Assessing the Impact of Research Support Activities

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Abstract: *An Academic Library Manifesto* **(**Bourg, Coleman and Erway: 2009) calls upon academic & research libraries to "embed library content, services, and staff within researchers' regular workflows" and "redefine reference as research consultation." Over the past few years, the University of Illinois Library has developed a range of new service programs that aim to provide research support that is closely integrated into scholarly practice. These initiatives include librarians that are embedded, physically and virtually, in campus departments and programs (e.g., Biotechnology, Global Studies, Labor and Employee Relations, Library and Information Science) as well as more broadly-focused programs such as the Scholarly Commons (which will provide coordinated support for data services, digitization, and scholarly communications) and the development of mobile and digital library services. This paper will review these research support services, with a focus on how these new initiatives have complicated and extended our traditional definition of reference and provided the opportunity to rethink how we measure and assess the impact of library support for research, teaching and learning.

Keywords: Reference, Research Support Services, Assessment, New Service Model Programs

Museums and the Art Galleries in the Digital Age

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Abstract. With the advent of World Wide Web (WWW), museums provide access to information, documentary films, story-telling times etc. Audiences can access information via WWW which is hidden in the museums physical walls. Some museum websites provide entire collection to their audiences while other museum-related websites provide selected presentations. Web facilitates audiences to access what they want anywhere, anytime without any geographical barrier. Web act as a bridge between audiences and the museum collections. Museums can be considered as heritage institutions. In this electronic era, museums are actively involving with their communities. It helps to build their own past while facilitating for the awareness of contemporary issues such as famine, racism, AIDS, and drug abuse.

Museums audiences can be scholars, teachers, students, museum staff, and museum visitors. To evaluate the services provided by the museum websites, a questionnaire can be distributed among the audiences via websites and through e-mails. Evaluations are helpful to provide efficient service to the audience. It attracts more audience to the sites. A survey also can be done within the museum website by taking visitor statistics.

Past times museums preserve their existing collection to satisfy its funding donor. But now the image has dramatically changed and it raised social awareness. In fact modern museums generate more active participation and conservation of cultural heritage. It develops quality of community lives. Due to this, there are considerable voluntary preservation trusts, heritage trusts, conservation trusts etc emerged in the world. Museum Community acts as the storage, creation centre for the objects and events of the museum. Museum ownership keeps always within the community except for objects. Objects have no physical or emotional home. Museums borrow the object from the people in the community and it returns as short-term exhibitions for their awareness. Museums are playing major role in the educational sector. Mainly museums encourage self improvement, self-respect, and self-actualization of its

community. Museums are the places where people can preserve their cultural heritage and life blood of any community in this world.
Keywords: new information, audiences, cultural heritage

National Reporting System for all publicly financed Libraries in Sweden
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Abstract. The National Library of Sweden and the Swedish Arts Council have commissioned a feasibility study of a new national reporting system for nearly 8.000 publicly funded libraries; including academic, public, and hospital libraries in Sweden. The study was conducted by Poul Henrik Jørgensen and directed by the National Library of Sweden's Expert Group on Library Statistics.
The aim of the new system is to streamline the aggregation, storage and distribution of quantitative measurements used to monitor and analyze library activities. In addition to statistical measurements, libraries also wish to consolidate and analyze transaction data harvested from operational library systems and content providers.
This presentation describes the objectives for the new system together with corresponding functional requirements and system architecture utilizing relevant industry standards (Atom, SUSHI, XMLA).
Keywords: Swedish library statistics, ANSI/NISO Z39.93 (SUSHI), XML for analysis (XMLA), IETF RFC5023 (Atom)

1. Introduction
Libraries face mounting demands to document the efficiency and impact of library services. But in order to perform a quantitative assessment of library performance, it is necessary to compile accurate and timely measurements and performance indicators.
A feasibility study has specified general requirements to a national system to collect, manage and distribute statistical information about library activities and services in Sweden. The system must serve the needs of nearly 8.000 public-, school-, hospital- and academic libraries. The study includes functional user requirements plus descriptions of major system functions and standard interfaces.

2. Functional User Requirements
Functional user requirements were collected through a series of meetings and web surveys with users representing different types of libraries. Library representatives provided a total of 700 answers to questions about assumptions and functional requirements to the new system. One noteworthy result is the requirement to handle local proprietary types of statistical information and transaction data in addition to standard statistical indicators data collected by national authorities.

3. Major System Features
The specified library reporting system must include features to manage statistical survey data and selected transaction files within a central data repository with flexible metadata.
Statistical data and transactions may be extracted and uploaded from local library applications while usage data may be harvested directly from electronic content providers. Data may be downloaded directly to spreadsheets and specialized analytical tools via industry standard interfaces.

4. Conclusions
Participating library representatives demonstrated a broad consensus about the functional user requirements to the national library reporting system. The shared data repository must include metadata and web services to facilitate integration with local library applications, third party services and analytical tools.

The New Challenges of the Statistics – Case UEF

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Abstract. Traditionally, the statistics of libraries have been based on the classical idea of the library but the structural development of higher education institutions taken place in Finland during the past few years, the changes caused by the new university act and their effects on the financing of the libraries of the higher education, have made it necessary to adopt new ways of measuring the library services and to show the impact of the library. One challenge is the comparability of statistics, key figures and quality measurement before and after the merging the organisations. We describe the case of the University of Eastern Finland (UEF) Library that was merged by the Joensuu University Library and Kuopio University Library. Even though the UEF was formed so that the frame organisations also were merged, the challenges of the statistics are practically the same.

References
Laitinen, M., Kangas, A., & Saarti, J., (2009). Statistics and surveys as tools for library management in Finland. *Proceedings of 8th Northumbria International Conference on Performance Measurement in Libraries and Information Services*. Libraries Plus: Adding Value in the Cultural Community. Instituto degli Innocenti, Florence, 17-20 August. (In press.)
Laitinen, M. (2008): Towards open, multidimensional measurement of library services – case: Finland. *World Library and Information Congress: 74th Ifla general Conference and Council* 10-14 August 2008, Québec, Canada.

The Next Generation of OPACs B? What do Experts Consider as Musts and DonB?ts?

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Abstract. In our conference paper we will present the results of two focus groups that were realised between two distinct projects (ACCEPT and Swissbib) within the E-lib.ch initiative, a project to establish a swiss digital library. The Swissbib project will provide the future swiss meta-catalogue which integrates most of the regional or other local catalogues in one application whereas the project ACCEPT provides user-friendliness and assures that the important aspects of usability are implemented.

On behalf of this, two focus groups were arranged with experts from public & academic libraries, library and information science and the usability community to transfer the expert's view to the Swissbib technical group. Every focus group put emphasis to different aspects and combined distinct qualitative methods for the evaluation of software. While the first meeting dealt with musts and don'ts of future catalogues (with a special focus on the possible advantages or inconveniences of the so called Web 2.0 technology), the second meeting concerned the actual Swissbib prototype.

The principles of focus groups were combined with the two methods of rapid prototyping and elements of the cognitive walkthrough method: in the first focus group the experts evaluated screen shots representing different states of the catalogue, during the beginning of the second focus group the expert were invited to evaluate the catalogue spontaneously in order to test more precisely the issues that were of most interest to them (Spontaneous & Dedicated Walkthrough). Both focus groups lead to very interesting results that did not only influence

the design of Swissbib, but are worth to be considered in the general context of digital libraries, esp. faceted browsing, advanced search interfaces, the presentation of search results, personal functionalities as well as the general design of catalogue search engines.
Keywords: search engines, catalogue, digital libraries, evaluation, focus groups

Non conventional marketing and its possible applications to libraries
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Abstract. For the time being, libraries are going through a phase of transition. Apart from their role as deposit of the cultural heritage, which does not seem to be disputed, they are tackling the tough competition of the Internet and the potential of digital resources and facing the deep changes in citizens' and scholars' ways of life and searching for information. The existence of libraries is no more taken for granted in numerous contexts where, in the past, libraries had a central function and position: this is the case of many branch and municipal libraries, of some parliamentary and corporate libraries and, even, of some academic and research libraries.

For sure, there is a need to rethink services and organisation in order to adapt libraries to the today's world. Actually, over the last centuries, libraries have profoundly evolved from the technological point of view; however, their theoretical approach has not changed as much and the way in which libraries and librarians perceive themselves is nearly the same as in the past.

In addition, there is a huge communication problem, since libraries are seen in a very traditional and old-fashioned way by the stakeholders themselves. The marketing experiences undertaken by many libraries have not always met the expected results, as libraries have approached marketing strategies when the marketing itself was bringing into question its principles and moving towards new paradigms. Consequently, a paradoxical situation occurred insofar as libraries' marketing policies turned out to be inadequate at the same time when they were applied.

All these things considered, from my point of view, libraries should promptly make up for lost time and make the most of the new marketing strategies, which altogether are called non-conventional marketing.

The rule book of non-conventional marketing encompasses ten ground ideas:
  1. from brand-DNA to viral-DNA
  2. from targets to people
  3. from lifestyles to life moments
  4. from brand awareness to brand affinity
  5. from brand image to brand reputation
  6. from advertising to "advertainment"
  7. from media planning to media hunting
  8. from broadcasting to narrowcasting
  9. from communicating to being communication
  10.   from market position to sense providing.

What do these ten rules mean on the part of libraries? How can libraries take advantage of the way in which society and human psychology work to recover a sense in people's mind even prior to meeting people's practical needs?

Does the scientific literature deal with these issues? Are libraries embracing the non-conventional marketing strategies and applying them in their daily activity? With which results?

This paper intends to give at least partial answers to some of these questions.

The Observatory of Public Libraries

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Abstract. This is a research aimed at the evaluation of public policies, through the use of a methodology based on different qualitative and quantitative tools, including the participation of society and government elements through the cyberspace.

The research focuses on the public libraries public policy, and can be used in any library sector or public area.

This research includes the consideration of citizens attitudes and the necessary multidisciplinary participation of experts, guided by a method (Mendez, 2000) in order to evaluate the government actions. It is proposed to create an observatory of the public libraries policy, technologically supported by an interactive web page.

This paper gathers research on the information society (Escutia, 2004) and the analysis of the government actions with respect to public libraries (Manzanera, 2004). Its purpose is to allow that the information and communication technologies favor accountability and transparency, as fundamental elements for the democratization and evaluation of public policies.

Keywords: observatory, public policy, evaluation, public libraries, transparency, accountability

References

Escutia-Montelongo, María-de-los-Ángeles. *Los observatorios de la sociedad de la información: una propuesta para México*. (2007). Tesis (Maestría en Bibliotecología). El Colegio de México, México, D. F.

Kusek, Jody Zall, (2004). *Ten Steps to a Results-Based Monitoring and Evaluation System: A Handbook for Development Practitioners*. World Bank Publications. Washington, D. C.

Magaña, Rosa-María y Germán Vargas-Larios, coordinadores, (2004). *Evaluación de las políticas públicas: redefinición o continuidad*. División de Ciencias Sociales y Humanidades, Unidad Izatapalapa, Universidad Autónoma Metropolitana, México, D. F.

Manzanera-Silva, Norma-Aída, (2007). *Las bibliotecas públicas: análisis de las acciones del gobierno mexicano, 2001-2006*. Tesis (Maestría en Bibliotecología). El Colegio de México, México, D. F.

José Luis Méndez, "La política pública como variable dependiente: hacia un análisis más integral de las políticas públicas", en José Luis Méndez (ed)., *Lecturas básicas de Administración y Políticas Públicas*. México, D.F., El Colegio de México, 2000 (in: www.colmex.mx/academicos/cei/jlmendez/).

One Librarian at a Time: Group Assessment via Self Assessment

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Abstract: Two components comprise success in a reference transaction: providing the correct answer and creating a comfortable learning environment using verbal and non-verbal behaviors. Analyzing and improving customer service and behavior is an important aspect of reference assessment.

This paper looks at two modes of assessment to improve reference customer service. The first mode is self-assessment: librarians choose a specific skill from the *RUSA Guidelines for Behavioral Performance of Reference and Information Service Providers* and focus on

improving that one skill. Librarians and other service providers then engage in regular self-reflection on his or her reference skills and practice the behavior, regularly articulating their self-assessments in writing.

The second mode of assessment uses digital reference transcripts as a learning opportunity. Individual librarians review reference transcripts for behavioral positives and negatives, discovering behaviors to emulate and behaviors to avoid.

This paper will discuss the questions we asked each librarian to reflect upon for these two assessments, the broad themes and commonalities of what people wanted to work on, and how we used this information to develop more formal training to improve customer service in our many reference services (in-person reference, in-depth consultations and digital reference).

Keywords: Reference, Assessment, Customer Service, Train

One Story with Many Chapters? Assessment in Complex Library Organizations

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Abstract: The adage "with size comes complexity" is as true in library organizations as it is in biological organisms. The University of Illinois Library is an example of complexity with a campus community of 40,000 users, 35 libraries serving 150 academic programs, a collection of 12 million volumes, and a staff of 400 people.

Recent trends in higher education coupled with a desire to improve services to our users, has lead the University of Illinois Library to embark on a program to assess its services. For assessment, the challenge lies in collecting data that can be comparable across our departmental libraries while preserving flexibility to reflect the unique services and clientele of each library.

Even the first step in assessment, deciding the assessment needs and what questions need to be answered, requires central coordination and input from a broad constituency. Thinking ahead to anticipate data collection needs, quantitative and qualitative, is essential as we cannot report on what we have not collected. Prioritization is another issue for the complex organization to stage the various requests for assessment.

This paper will outline the challenges and techniques of telling a cohesive story that still highlights the unique aspects of the library's diverse services and how the University of Illinois Library is coordinating an assessment program to tell the story of a complex organization.

Keywords: Reference, Assessment, Organizational complexity

Open access institutional repositories: the Greek reality

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Abstract. Many Greek academic institutions, especially after receiving substantial funding from the EU have tried to create and support open access institutional repositories. Most of them, though, are small and in some cases more than one repositories hold the same content. But, do really, Greek institutions have the means to maintain open access repositories? Also instead of building many overlapping, small institutional repositories we examine the possibility of creating cooperative subject repositories. This way kindred institutions can work together, split the economic burden and organize in a more efficient way the repositories.

This research is trying to prove first, whether Greek institutions have the means to support the operation of open access repositories (by means of manpower, infrastructure and the know-how). Also, with the help of questionnaires we examined the views and disposition of the proper authorities, that is the deans in charge of academic and administrative matters.

The survey took place in January 2009 – March 2009 and included all 38 Public Institutions of Higher Education in Greece.

The results of this research show us how much open access institutional repositories are valued in Greek academic institutions, if they have the necessary background to support them and if open access is in the future plans of their administration.

Keywords: open access, institutional repositories, subject repositories, Greece, Higher Education

Paving the way for Interoperability in Digital Libraries: The DL.org project

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Abstract: While Digital Libraries are working towards making universally accessible collections of human knowledge a reality, considerable advances are needed in Digital Libraries methodologies and technologies to make this happen. Achieving interoperability between Digital Libraries is a crucial requirement for reaching this goal.

Interoperability is a multi-layered and context-specific concept. It encompasses different levels along a multidimensional spectrum ranging from organisational to technological aspects. Addressing the interoperability challenges is the prime goal of the DL.org project. DL.org is advancing the state of the art in this area, and is proposing solutions for interoperability in addition to best practices and shared standards, bringing together knowledge from the DELOS project and expertise of Digital Library stakeholders. To achieve its objectives, the project is looking at the DELOS Digital Library Reference Model and investigating interoperability from the viewpoint of the six fundamental Digital Library concepts: Content, User, Functionality, Quality, Policy, and Architecture.

Our paper describes the results of DL.org research, and how the project is addressing the interoperability challenge from the perspectives of the six domains. Relevant Digital Library interoperability aspects will be described, from conceptualisation at a high organisational level to instantiation at process level, and modelling techniques for representing and enabling interoperability between heterogeneous digital library mediation approaches, methods, and systems. By pursuing the interoperability goal, DL.org is paving the way forward for embedding new research achievements into real-world systems, and is supporting the advancement of research and the creation of a European Information Space for the knowledge-based economy.

Keywords: Digital Libraries, Interoperability, Delos Digital Library Reference Model, Content, User, Functionality, Quality, Policy, Architecture

Performance Appraisal of Library Staff Working in Turkish Universities

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Abstract. Staff appraisal is one of the controversial and significant topics of staff management. Staff appraisal is an important component of a well organized staff management. It influences areas such as employment criteria, task planning, waging policy, promotion, professional development, motivation, career development and training etc.

The issue of performance appraisal has become widespread in libraries since 1980s. Today, rapid development in the world affects libraries like any other institutions. It is vital for libraries providing service in a competitive environment to improve the quality of their service and efficiency. For this reason, libraries should benefit fromstaff appraisal methods in each phase of their services.

The research aims to reveal how and by whom staff appraisal efforts are carried out in university libraries in Turkey and how library staff perceive and consider staff appraisal. In the research, the applications in public and private sector libraries were compared; the points to be considered in a modern staff appraisal model applicable throughout the country were presented while the troubles observed as a result of the evaluation and the expectations on performance appraisal criteria were pointed out.

In the research, which uses the descriptive method, the data were collected by use of such techniques as literature survey, questionnaire and interview. The questionnaire was applied to all staff working in university central libraries in public and private sector in Ankara.

The hypothesis that advocates "the current performance appraisal methods applied in university libraries adversely affect the attitude of the library staff" has been proved at the end of the research.

As a result, it is established that the opinions of the university library directors and staff about the efficiency of the performance appraisal method used are negative. Other findings of the research reveal that there is a significant difference in the attitude of the staff working in university libraries towards the performance appraisal method applied depending on the status of the library and their position as a director or staff.

Keywords: Performance Appraisal, performance management, staff management, university libraries

Personal Controlling in Polish Library

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Abstract. Personal controlling is an internal system of monitoring, analysis, evaluation and decision making process that is being used to achieve the objectives in specific areas of human resource management in the enterprise. Application of the personal controlling system in the libraries points at the identified areas requiring amending and improvement projects. One example is the Library of the University of Gdansk, where the SWOT method is used to analyze the strengths and weaknesses of human resource management. Tests have been made on a system of motivation to work, promotion opportunities, wage policy, the use of employee qualifications, training system and professional training, adaptation and socialization of employees, the rationalization of employment in the various sectors, setting the hours, the level of job satisfaction, working conditions, professional satisfaction, absenteeism and liquidity of the crew. The possibility of using the personal controlling in the libraries optimizes usage of human resources that are held, eliminates accidental events, controls the activities in the future and contributes to the achievement of the whole institution.

Keywords: personal controlling, motivation, management library

Policy and Quality Interoperability of Digital Libraries: an organisational perspective

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Abstract: Interoperability is a property referring to the ability of diverse systems and organisations to work together. Today interoperability is considered a key step to move from isolated digital archives and digital libraries towards a common information space that allow users to browse through different resources within a single integrated environment.

Approaches to policy and quality within digital information system are often ad hoc and based on a single institution focus. They frequently fail to take into consideration the interoperability requirements needed to allow digital repositories to cooperate and to exchange their digital objects. Here we propose an organisational perspective to policy and quality interoperability, and present an overview of how the EU-funded DL.org (http://www.dlorg.eu/) and international experts are investigating a shared policy and quality framework between diverse digital libraries.

The interim outcomes of this research are described, including how external parties may also benefit from the findings.

DL.org is identifying interoperability issues preventing digital libraries from working together and addressing the most immediate challenges to interoperability.

Keywords: DL.org, Interoperability, Digital Libraries, Digital Archives, Policy, Quality, Information Systems Modeling

Polish library and not library tools to help community to assess quality of scientific content

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The Author's aim was to investigate how Polish libraries, among other institutions, participate in creating tools for scientific content quality assessment by specialists and general public. The Polish libraries' and public health institutions' web sites were investigated. Web content analysis and descriptive statistics were used to identify quality assessment tools and their attributes. Also individuals were observed. It was monitored how many times a library tools were used by the participants of the study. In conclusion, Polish library information assessment tools are used only by professionals of a given faculty. However, there are few tools for general public to assess health information, so they do it preferably with the help of the Internet community, with web 2.0 tools, for example patient's virtual groups. There is a social need for libraries to participate in research and in design of tools for evaluating health information. Libraries should actually participate in education of users.

Keywords: consumer health information, quality of information, evaluation, information literacy, information sources

Preservation performance assessment in Greek libraries and archives: a practical tool to enable excellence

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Abstract. Preservation management in cultural institutions as a process has not been adequately or systematically addressed, in terms of measuring quality or maturity, with internationally established measures. Self –assessing the preservation status can enable organisational learning and drive actions. To contribute to this research, the University of the Aegean, Department of Cultural Technology and Communication, implemented a comprehensive, nationwide research to assess the preservation status of the collections of the Public Municipal and Academic Libraries, as well as the General State Archives. The survey seeks to expand available knowledge on the institutions' preservation actions, policies and approach to the preservation process. Based on this original research, an easy, diagnostic, yet comprehensive, self –assessment preservation performance tool is being developed to assist mainly medium size institutions, in measuring their preservation quality level and thus, plan a preservation roadmap. This tool will be available on line through the university's website and will be accompanied by a guide in order to guide the institutions' preservations actions after their preservation level is defined.
Keywords: self assessment tool, preservation, libraries, archives, maturity model

A Private University Librarian's Experience on Procurement of Books in Bangladesh

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Abstract. The private universities in Bangladesh are playing an important role to modernize the higher education system in the country and the role of librarians is also different and challenging. Specially procuring books and monographs is an exigent function being this lost its demand very quickly. In some cases titles bears only one semester necessity. Suppliers frequently fail to supply books needed in a semester and late arrival of books is another phenomena which frustrates private university librarians in the country. In these circumstances Independent University, Bangladesh trying to establish a method for working with the best book suppliers. Experience shows that apparent goodwill or gorgeous showrooms of vendors sometimes mislead the librarians. Best way is to determine some criteria and each criterion should be weighted. The weight may differ from criterion to criterion. Performance in the latest year may receive maximum number in the weighted formula. Goodwill, interest to work with the university, up-to-date-ness, availability of resources, maximum discount, etc. may be included in the weighted formula. Performance of the consecutive three years would guide one to select a vendor from the old panel of suppliers. This paper describes the situation of procurement and the crisis faced by the private universities particularly the Independent University, Bangladesh.
Keywords: Book procurement, Acquisition process, Vendor evaluation, University Library, Foreign resource dependency, Timely procurement.

Psychometric properties of the Computer and Web Attitude Scale (CWAS): An application to Greek Library students

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Abstract: The Computer and Web Attitude Scale (CWAS) is a self-reported instrument consisting of a Computer Attitude Scale and a Web Attitude Scale to discover individual attitudes towards computers and Internet technologies. The purpose of the present study was to examine the underlying structure of the CWAS in a Greek setting and to investigate the relationship between attitudes and selected background variables. A sample of 240 Library Science students completed a Greek version of the CWAS. Overall two separate exploratory factor analyses were conducted, for CAS and WAS respectively. Exploratory factor analysis of the CAS scores showed that three factors could adequately explain the 59.5% of the variance. In addition, the internal consistency of the factors as assessed by the Cronbach's α was satisfactory ($\alpha > .80$). Similar results were found for the WAS. In particular, three reliable factors were extracted, which accounted for the 62.3% of the variance. Again the internal consistency was satisfactory ($\alpha > .79$). Correlation analysis showed moderate positive associations among the six dimensions. Mean values of the CWAS dimensions suggested that participants had positive attitudes towards both the computers and the Web. Additionally, certain background characteristics were found to influence the levels of their attitudes. In conclusion, results showed that the Greek version of the CWAS is a valid and reliable instrument and can be safety used to assess attitudes towards Internet and computers in the Greek cultural context.
Keywords: computer attitudes, Web attitudes, exploratory factor analysis, library science students, Greece

Publishing Patterns and Authorship in the Scholarly Literature of Digital Object Identifiers: A Bibliometric Analysis
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Abstract. A Digital Object Identifier (DOI) is an alpha-numeric standard for the use of identifying intellectual property within computer networks and is a recent trend in the field of the electronic publishing of scholarly articles. This study examines the publishing patterns in the scholarly literature of digital object identifiers. The research includes core journals, professional affiliations, gender, and geographic locations. Additionally, the primary disciplines represented in the authorship of the DOI literature are observed.
This paper was submitted in the LIS651 course, Introduction to Library and Information Science, during April 2007, as a partial requirement for a Master's degree in the School of Library and Information Science, at the University of Southern Mississippi, Hattiesburg.
Keywords: Literature, Information, Digital Object Identifiers(s), DOI, Articles, Library, Science, Research, Digital

Qualitative Communication Strategy for Library Users in e-Environment

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Abstract: Information explosion occasioned by information and communication technologies poses the challenges of satisfying user expectations with traditional library services. Librarians are expected to provide variety of services by using modern communication technologies. User's needs which are not static also changing according to the emerging information technology\ies. In today's e-environment, users expect to receive information quickly and without having to visit the library. With each advance in technology the time of the user to retrieve information has shown a drastic reduction. The emergence and increasing availability of the Internet and Web technology has led to a lot of information outside the library tempting users to depend less on libraries and to explore these alternate routes to fulfill their information needs. The rise in number and variety of information resources and the inability of most libraries to acquire/ access them also leaves the libraries less able to meet the needs of clients, forcing the library and staff to shy away from their new roles. Where on one hand, information overflow has created problem for users to get relevant information from the sea of information and on other hand ICT and modern e-environment has become a challenge for librarians to provide better qualitative services to their clientele. To meet the changing information needs of users, libraries should have proper qualitative communication strategy to provide qualitative library services to the user community. Networking of libraries (to establish better communication among libraries), consortia based benefits, web OPAC, web 2.0 applications, RSS, e-mail reference services, web form, chat reference, virtual reference, web contact centre, VOIP, video conference and information visualization etc. are the qualitative communication strategies and tools to satisfy the users for providing filtered & fast required information. This paper discusses the role of communication technologies to provide better and qualitative services to the users. Challenges in communication strategy and how can meet these challenges to deliver qualitative services to the users also discussed.
Keywords: ICT; Qualitative Services; Communication Strategy; Information & Communication Technology; e-Environment.

Qualitative Factors in the Creation of an Academic E-catalogue: Experience from Serbia

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Abstract. Many academic libraries in Serbia are members of the Virtual Library of Serbia (VLS) which uses software COBISS 2 (Cooperative On-line Bibliographic and Information System & Services). Every academic library included into the VLS tends to focus on some unavoidable problems in the field of quality. Therefore, this paper concentrates on qualitative factors in the work of libraries which permanently contribute to the creation of the Virtual Library of Serbia. This is as a permanent process. Cataloguing and classifying library materials are usual professional activities in many academic libraries. International standards for bibliographic description of library materials are in the very core of library excellence as far as an academic electronic catalogue is concerned as well as the Virtual Library of Serbia itself.

 Some problems of quality which were neglected are solved successfully. However, some other problems appear. The main aim of library staff is to help real and potential, internal and external users in order to find indispensable bibliographic units as well as materials for academic and scientific purposes. The number of library users as an illustration of library work doesn't mean much today. Their number and their loyalty as well, mean much more in

the Information Society where libraries are to be among the leading organizations which participate in its' development.

Quality and Evaluation of Information Systems in Institutional Organizations
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Abstract. The factors responsible for the quality, the success and the efficiency of an organization's IT system are always a substantial and important aspect for the structure, robust operation and successful course of the produced services and products of the organization allocated to its final users, both internal (the employees of the organization) and external (the public).

In our days, the need to create appropriate parameters, which shall aim in evaluating and measuring in detail the successful operation of an institutional IT system, is more and more intense. The purpose of the current study is, firstly to introduce us to the environment of the institutional IT systems, as well as to provide us with a more complete and extensive view of their operations and processes, of their infrastructure and success factors. Through Theory of Systems, we shall examine the analysis and the design of an IT system, and discover its quality parameters regarding its success and evaluation.

In addition, we shall examine the quality measurement model for IT systems, the so-called "DeLone & McLean Model of Information Systems Success". We shall have the opportunity of finding exactly what each parameter of the specific model examines, by investigating concepts such as system quality, information quality, user satisfaction, individual impact and organization impact. At the same time, an application shall be developed for the evaluation of the quality of an "Organizational Memory" IT system, which is called the "Organizational Memory Information Systems Quality". This model is an expansion of the DeLone & McLean success model. The main purpose of this study is to have a constructive discussion regarding the quality in terms of operation, infrastructure and provided services of the institutional organizations (Libraries, Archives and generally Information Agencies), as well as to focus on the usefulness and importance of the efficiency's measurement factors in an IT system, as this procedure is developed within the Society of Information, which transcends to a Society of Knowledge.

Keywords: Information Systems' Evaluation and Quality, Institutional Organizations**,** Users' Satisfaction, IT Systems' efficiency measurement

Quality Management Approaches in Multimedia Digital Libraries and Information Services
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Abstract. Digital Libraries are emerging technologies for document management. There is currently considerable interest in developing in quality management in multimedia digital libraries and information services. However, it has become clear that existing architectures for management systems do not support the particular requirements of continuous media types like music, videos, images, maps, and mixtures of different content types (multimedia objects). It requires new methods of all aspects of multimedia data management. Digital libraries have to use all modern network and servers technologies in order to supply services

of a high quality. We discuss quality of service issues within digital libraries and present reference architecture able to support some quality aspects and effectively implementing quality management in libraries requires an understanding of applying appropriate quality management concepts and techniques. Also we discuss a Quality Management Framework that we applied for the improvement of both the Quality of the digital output and the efficiency of the processes. In addition, a framework of quality management approaches and techniques is developed and applied to assess and improve the service quality of libraries and information services. In this paper we discuss the major quality concerns of data from the digitization process, and how we assure for better quality before they are web enabled for the end-user to use.

Keywords: Quality of Service, Data Quality, Digital Libraries, Multimedia Databases, Quality Assurance

The READ Scale (Reference Effort Assessment Data)©: Qualitative Statistics for Recording Reference Effort, Skill, Knowledge and Teaching
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Abstract. A 2002 Association of Research Libraries survey on reference statistics & assessments suggests that many libraries were not satisfied with the usefulness of statistics gathered for reference services, with 'a lack of confidence in current data collection techniques':
"With many librarians feeling as busy as ever, some have concluded that the reference data collected does not accurately reflect librarian's level of activity". (ARL/SPEC/Kit268)It was with similar sentiment that the READ Scale was developed. The READ Scale (Reference Effort Assessment Data) is a six-point scale tool created for recording vital supplemental qualitative statistics gathered when reference staff assist users with their inquiries or research-related activities by placing an emphasis on documenting the effort, knowledge, skills and teaching moment utilized by library staff during a reference transaction.
Research grants enabled a national study in the United States of the READ Scale at 14 diverse academic libraries that tested the viability of the Scale as a tool for recording reference statistics. The study collected data from 170 individuals and 24 service points, with over 22,000 transactions analyzed. An anonymous online survey of participants yielded a 60% return rate with over 80% of respondents indicating they would recommend and or adopt the Scale.
With these survey results from the study, numerous inquiries from other institutions asking to use the READ Scale and growing audience numbers at conference presentations (ALA, ARCL, ARL, ICERI), it appears that reference staffs are ready to try new methodologies for data collection, and that the READ Scale has the potential to transform how those statistics are compiled, interpreted and valued. By continuing to gather input from libraries that try the READ Scale, a large body of statistics will help to normalize the Scale even more, with an aim to create a dialogue among professionals and recognize the value of reference work.
The presentation proposed will share the results of the United States study and cite examples from additional institutions currently using the Scale. The researcher hopes that through the presentation and engaging in dialogue with international colleagues to to expand use of the READ Scale globally.

Keywords: Reference. Statistics. Qualitative Research. READ Scale. United States Study.

Recording and Reflecting: Research-driven journals and diary-interviews to support decision-making for mobile-based services for libraries.
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1. . Introduction

The use of journal or diary research is a well-established method in applied social sciences to elicit data on recording routine or everyday processes. While the value of journal logs is recognized in LIS research methods literature, libraries have not yet taken full advantage of journals for data collection. This presentation reports on a study that applies the method of journal keeping in combination with diary-interviews to investigating the use of the Kindle, a popular electronic reader, by LIS students. The study intends to explore/understand the social and cultural impacts of e-book readers on everyday life's reading habits of LIS students to inform decisions on the deployment of e-readers and similar mobile technologies for library delivery systems. LIS students were chosen because, as future information professionals, their education focuses on issues of information dissemination in all its formats and consequently they were likely to provide a view of early adopters of technology. The study offers a case study evidence of the effectiveness of this qualitative research method for recording events over an extended such as everyday life information behavior.

2. Study Description and Methodology

In Spring 2009 a pool of twenty LIS students at Pratt Institute's School of Information and Library Science was assigned the task of using a Kindle over a one-week period each. Participants were asked to keep a journal to record observations on the experience. Upon returning the Kindle and the journal, a diary-interview was conducted to supplement and strengthen the journal data. Journals logs where coded and analyzed with the use of Atlas.ti. Transcripts of diary-interviews were also entered and triangulated with journal data with the support of Atlas.ti. This method significantly streamlined the content analysis process.

3. Discussion of Results and Conclusion

The findings offered deep insights into the LIS students' behavior and attitude towards mobile device-based reading. Journaling followed by diary-based interviews allowed researchers to more accurately capture actions and patterns of usage as well as personal observations that could inform the design of mobile-based services in libraries and information centers. These data collection techniques have proven to be a suitable alternative to traditional interviews, especially for situations and events that can be difficult to remember accurately. The study offers evidence of the effectiveness of journaling and diary-interview methods in qualitative research when direct observation of everyday life activities in natural settings is problematic.

Keywords: Portable e-book readers, Diary research, User needs

The Relationship between University Libraries' Collection for Sports and their Students' Sports Performance

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Abstracts. Some Japanese universities have faculties which are specialized in sports (or physical education). In intercollegiate sports competition (such as for basket ball, football, etc), the students who belong to such faculties have often won the prize and showed good performance. Then, have university libraries' collection for sports contributed to their performance? If it was shown that qualitatively and quantitatively better collection has some relation to better performance, we can partly claim the usefulness of libraries. Although there are many studies concerning libraries' effectiveness, few studies have been done for contribution to sports performance. Based on this background, we investigated the relationship between the affluence of collection for sports and the universities students' sports

performance. **Method.** First, we submitted sports-related keywords to OPAC and counted the numbers of books relevant to the keywords. By this, we obtained the numbers of books per students who belong to the sports faculties in each university. Secondly, we obtained the ranks of sports performance of each university which are determined annually by Waseda Sports Newspaper. We compared the affluence of sports books between top 10 universities and 11th-20th universities in the ranking. **Results.** We found that the average number of sports books per students in top 10 universities was higher than that of 11th-20th universities. The tendency was clearer for practical books rather than basic academic books. For instance, the average number of books for "exercise physiology" per students in top 10 universities and 11th-20th universities were 0.076 and 0.077, respectively, while those for "sports training" were 0.034 and 0.024, respectively. Of course we cannot say that it was proved by these results that better collection produce better performance (it is always difficult to prove such causal relationships), however, we can say that they have some relationships and can modestly claim the effectiveness of libraries.

Research library statistics – For whom and for what purpose? The statistics users' views and wishes

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Abstract: The paper reports a project conducted within the framework of the National Library of Sweden's Expert Group on Library Statistics. The project is financed by the National Library of Sweden, and it aims to capture how library managements make use of the current library statistics (based on the ISO-standard) in the decision-making process. Questions are also asked about the quality and usefulness of the existing statistical data, whether data covers all relevant aspects of library activity, and what additional data is required in order to enhance the validity of collected statistics.

The primary method used is semi-structured group interviews (focus groups). Four such interviews were held with the participation of 15 library directors from academic and other research or special libraries from different parts of Sweden. The results show that there is considerable ambivalence among the informants concerning the usefulness of current statistics. On the one hand there is severe criticism of what today is reported on a national level (too much and too little), on the other hand statistical data is used locally to underpin arguments supporting library activities.

Stakeholders representing university or institutional management were not available for group interviews. With the support of the interviewed library directors a group of 12 vice-chancellors or other senior managers were identified and approached with a mail survey. Questions were asked about what kind of documentation of library activities they use or prefer, be they quantitative, qualitative or of other kind.

Keywords: Sweden library statistics, use of statistics, group interviews, focus groups, survey, library management, academic management, decision-making process

Research Rigor and Reliability: A study of offshore international students' use of Australian university libraries online resources and services

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Abstract. This paper discusses rigor and reliability issues involved in conducting a concurrent mixed-method research project. It explored offshore Chinese students' information seeking behaviour in P.R. China. It explains some rigorous investigation processes undertaken to explore barriers preventing the use of Australia university libraries' online information resources and services by the students in trans-national environments. It describes validity considerations in data collection, translation and interview transcription, coding, data interpretation, data analysis and integrating analysis results. It highlights the challenges and strategies of instating rigor and reliability in the research project. It shows that by observing validity issues, research findings obtained through well justified evidence of the real research phenomenon are made more valuable.
Keywords: information seeking behaviour, concurrent mixed-methods research, rigor, reliability

Revision and harmonization of the statistical surveys of all types of publicly financed libraries in Sweden
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Abstract. This paper highlights the efforts of the National Library of Sweden's Expert Group on Library Statistics to revise the statistical surveys given to the different types of publicly financed libraries in Sweden. Statistical data are currently collected from public libraries, academic and research libraries, school libraries and hospital libraries in separate long series. For a number of years there has been a growing discontent with the quality, scope and usefulness of the collected data. The Expert Group has therefore set out to revise the surveys, taking several parallel actions:

- Reference groups and feed-back fora have been created for the four different library types.
- Efforts are taken to harmonize terminology and definitions used in the different surveys.
- The periods for data collection as well as the date for the publication of reports have been synchronized.
- Seminars are held to enhance common awareness and competence on the use of library statistics.
- A project that aims to capture how stakeholders make use of library statistics and other documentation in the decision making process has been undertaken. *(A paper proposal describing the project has been submitted to QQML2010)*
- A feasibility study of a new national reporting system for library statistics has been conducted. *(A paper proposal describing the study has been submitted to QQML2010)*

The efforts have revealed a strong need for making the collected data useful on different geographical levels; local, regional, national. There is also a need to make analyses that transcend the organizational boundaries of different library types.
Keywords: Sweden library statistics, revision of statistical surveys

Satisfaction and Relevance of Libraries and Technology in Ukraine and Romania
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Abstract. This presentation will address the results of national public opinion surveys conducted in Ukraine and Romania by the Global Libraries programs, implemented by IREX. The surveys assess national library visitation rates across demographic groups, satisfaction with the library and librarians, information search and information literacy patterns, and ICT familiarity and skills. The results of these surveys form a key basis for national and local advocacy and outreach efforts on behalf of libraries, and the surveys will be repeated in 2011 and 2013 to assess changes. The Global Libraries programs in Ukraine and Romania, funded by the Bill & Melinda Gates Foundation, aim to help libraries better serve their communities through training and technology.
Keywords: Ukraine, Romania, impact assessment, national survey, library satisfaction, technology

Searching library Web site at the time of Web 2.0: Who does what? How FAQs can play a central role in retrieving basic information.
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Abstract. Online communication certainly carries out a strategic role in the process of innovation in different fields. Nowadays, besides the traditional Internet tools, Web 2.0 technology development underlines the strong need to maintain an open channel of dialogue either with or among users. As a matter of fact, the experience in searching library Web sites pointed out that the availability of too much help such as tips, sheets etc. instead of facilitating information access, often, can create confusion for users and make navigation through a Web site they are interested in a waste of time. On the other hand, a well structured FAQs (Frequently Asked Questions) could be a precious customer support reducing the amount of noise and waste by increasing the efficiency of the answers. Starting from a survey, previously conducted on about 300 scientific library Web sites, involving FAQ presence, location, labelling and so on, this paper focuses on the effort to greater analyze p!
ossible FAQs normalization trying to build a methodology: assuming FAQs as a sort of knowledge base related to a particular specific Web site content the attempt to create a standardized model is presented. A series of measures to make FAQs more action oriented and attractive to user participation are suggested. Appropriate quantitative/qualitative FAQs can determine the success, in term of ease of use and quickness, consumers have in getting the information they need, and the manner in which they could be helped to manage it: in this reference frame a FAQs section can act as a successful tool to improve overall digital information usability as well as customer satisfaction.
Keywords: web sites, information retrieval, information management

Simple and compose indicators for quality and quantity measurement in libraries

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Abstract. Libraries and other information organisations are enterprises in the management of which measurements and indicators are important factors of success. Indicators characterize in quantitative and qualitative terms events, objects, or activities of an enterprise. Libraries, although they operate as enterprises, the cost and incomes can not use as measures of their effectiveness. Thus, it was considered necessary the creation of special libraries indicators.

ISO corresponding to the libraries commitment in the development of standards for library performance, decided in 1998, to built up a standard for library performance indicators. These indicators aim to support the measurement and analysis of the present situation of any kind of libraries.

According to the ISO technical committee responsible for the development of this standard, (ISO 11620, 1998) B«these indicators can be used for comparisons over within the same library. Comparisons between libraries may also be made, but only with extreme caution, taking into account any differences in the constituencies of the librariesB» and goes on saying that: B«This International Standard does not include indicators for the evaluation of the impact of libraries either on individuals or on societyB». B«Performance indicators are not specified for all services, activities and uses of the resources of the library.....B»

ISOBs indicators are simple indicators measuring a variable each time. However any variable is affected of other variables, even within the same library. Social and economic conditions within, libraries provide their services are unique for any library. Each indicator has itsB own objective and purpose which determine variables that should be included in the creation of an indicator.

Moreover, the use of simple indicators for comparisons between two different libraries may give uncertain estimations. Hence, in order to compare effective performance between two or more libraries more variables defining socioeconomic factors of librariesB   environment, should be taken into account in the creation of their indicators. In this case, library indicators should function not only as an assessment of the quality and effectiveness of a libraryB s services but also as a tool estimating their impact in the environment they provide their services. Socioeconomic conditions under which each library provides it services, considered as an important factor in its development and should be taken into account, especially for public libraries.

The aim of this paper is to propose composed indicators in which, more than one variances are estimated arguing that indicators of other factors of social and economic conditions influencing services provided by libraries should be taken into consideration in the construction of library performance indicators.

KeyWords: library indicators, simple library indicators, compose library indicators, library social-economic impacts

Squaring the circle: a comparative perspective on digital library evaluation models
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Abstract. This paper will describe the key research advances on digital library evaluation models.

Digital library evaluation has a vital role to play in building DLs, and in understanding and enhancing their role in society. The paper will cover the theoretical approach, providing an integrated evaluation model which overcomes the fragmentation of quality assessments, and propose some examples of DL evaluation methodologies, undertaking a comparative analysis of them.

Digital library evaluation is a growing interdisciplinary area. Researchers and practitioners have specific viewpoints of what DLs are, and they use different approaches to evaluate them. Each evaluation approach corresponds to a DL model, and there is no common agreement on its definition. Despite that, more and more efforts have been made to evaluate DLs. However, a methodology that encompasses all the approaches does not yet exist. There are two main reasons for this:

1. digital libraries are complex entities which need interdisciplinary approaches
2. digital libraries are synchronic entities: the speed of evolution of DLs coupled with their lack of historical traces makes a longitudinal analysis difficult if not impossible.

Nevertheless, DLs and DL research have reached a level of maturity such that a global approach to their evaluation is needed. It would encourage exchange of qualitative data and evaluation studies, allowing comparisons and communication between research and professional communities.

This paper will provide the research advances in the field and a theoretical framework for digital evaluation models.

Subject categories for browsing in digital libraries: proposal for a model adapted to children.

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Abstract. Currently, children are used to handle online information resources constantly; in fact, they are one of the most devoted users of new ways of communication, as Internet, which they receive and connect to enthusiastically, weather for informative or funny purposes. However, in most cases they do not have another choice but access to information resources organized and conceived for adult users. In order to promote that children get an autonomous access to these resources it is essential to design information retrieval systems adapted to their own cognitive skills, subject representations and seeking strategies. That means it is necessary to understand their mental models, both related to the knowledge field and to the tools they are interacting with.

This work offers results from a research project developed in collaboration with the Centro Internacional del Libro Infantil y Juvenil of the Fundación Germán Sanchez Ruipérez. The aim is to know the characteristics of the terminology used by children in their subject searchings about child literature, in support of a classification scheme that enables to browsing in a visual context. Qualitative methodologies were applied for collecting terminology used by children aged 6 to 11 for describing or searching works of fiction. The children themselves classified the selected terms within a participative method, so that it was obtained a categorization that reflects their mental model of child literature.

Results show that children´s categorization does not match with the traditional scheme based in literary genre from bibliographic classifications. There is a clear divergence in concepts related to real world (grandparents, cats, etc.) and those related to fiction (dragons, Pinocchio, etc.). Variations observed depending on the age groups (aged 6 to 8 and aged 9 to 12) proved the evolution from personal to cultural classifications, just as previous studies have revealed. It was also noticed some other factors: a larger presence of concrete matters among the youngest ones and the identification of an emotions and feeling category done by the oldest ones. Subject categories derived from children´s classification in this study will be the starting point for the following phase of this research, which will be concentrated on the creation a taxonomy that facilitates the browsing searching.

Keywords: Online information searching / Children / Subject categories / Browsing / Searching behavior / Child literature / Interfaces

Supporting PDF accessibility evaluation: early results from the FixRep project

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Abstract: The aim of this paper is to present results from a pilot study run within the FixRep project., which aims to examine and enhance existing techniques and implementations for automated formal metadata extraction. Formal metadata, such as filetype, title, author and image captions (by comparison to subject metadata, which usually draws on information extrinsic to the document itself) is mostly intrinsic to the document and its citation. Some formal metadata is collected by almost all repositories. Information about some types of accessibility may make up part of the formal metadata for a document.

As the importance of document accessibility has become more widely accepted and relevant legislation, such as the Disability Discrimination Act (1995) in the UK, has been identified, the possibility of storing information about document accessibility as part of the formal metadata held by the system has become more attractive. This is useful for various purposes, primarily in order to provide a starting-point for an accessibility assessment, leading into a triage process.

In this study, we began with exploration of the PDF format, widely used across a large number of contexts of use in the digital library environment. Web-based uses of relevance to digital libraries for example include: forms; printable versions of resources, particularly those (such as PowerPoint documents) for which there is no free viewer available; and pre-prints of papers and articles. It is not always widely recognised that two different encodings for a given PDF may have entirely different properties as regards accessibility. A well-formed document with extensive annotation and may be quite usable via a screen reader. Another may be entirely unreadable with accessibility software. When printed or viewed on screen, the two may appear identical.

We report on existing software packages that aim to support the accessibility assessment of PDF documents. We introduce a prototype written during the FixRep project, that aims to support the capture, storage and reuse of accessibility information where it is available, and to reconstruct required data from available sources where it is not. Finally, we discuss possible use cases for this prototype in a practical repository context, exploring how and where automated evaluation methods such as these can be usefully applied.

Tracking changes of Library users' preferences using multicriteria analysis

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Abstract. Libraries constitute a highly developing sector as they always enrich their offered Services in order to satisfy users' expectations. One of the most important factors in customization strategies and improvement of individual services must be users' preferences. However, customization requires an in-depth analysis of current users preferences and an evaluation of future behavior. The main objective of the paper is to present a framework for analyzing changes of users preferences in a Library.

The paper presents detailed results of two independent users satisfaction surveys conducted in an interval of 5 years in the Library of Technical University. However, the framework can be applied in every modern Library. The analyses are based on non-parametric statistical techniques and the multicriteria satisfaction analysis method, which is a multicriteria preference disaggregation approach.

Results are mainly focused on the evaluation of potential trends of Library's users' preferences. Furthermore results of a benchmarking analysis are also presented, based on the evolution of satisfaction levels for the quality characteristics of the offered services.

The goal of presented study and proposed framework and methodology is to help Library decision makers to track changes of users' preferences and improve offered services according to them.

Keywords: Users' Satisfaction, Multicriteria Analysis, Evaluation, Strategic Planning, Quality Management

Trends and measurement of library use in France (1973-2008)
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Abstract. Public libraries need to know their attendance to define and conduct their policy. They can thus evaluate their activity and justify their existence to local authorities. In France, the way we take the library use measurement is not exactly the same as in other countries. For a long time, the focus had been on the rate of registered users. This index enabled us to estimate the audience of public libraries (i.e the part of the population that is registered to it). Before the nineties we observe an increase of this index. Then, in the nineties, it begins to become stable at around 18%. It was thus criticized because it was suspected not to take into account visits made by non registered users. Another way of measurement of library use was developed. Instead of the data recorded by the libraries, we used extensive polls to measure the rate of population that declared to visit public libraries. Thanks to this new index, library attendance seemed to be higher and rising up to the last few months. In fact, the new poll challenges the trend that had seemed to appear in the results of the previous ones : we observe an erosion since the beginning of the 2000s.

In this paper, I'll try to present both this history of public library use in France and the way it is measured. Finally I'll discuss the situation of the library attendance: how can we interpret this trend? What does the comparison with evolutions in other countries tell us about French public libraries?

Triage as methodology for identifying and prioritising learning needs of university library practitioners in Vietnam

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Abstract. This paper focuses on triage – a qualitative methodology to identify and priority learning needs. This methodology originally is suggested by Nowlen (1988) in Performance Model for continuing education for businesses and professions. The paper presents and discusses the adaptation of Nowlen's triage in order to identify and prioritise learning needs of university library practitioners in Vietnam. The paper also presents and discusses the data analysis, the results as well as assesses the triage adapted in Vietnam. The paper seeks to assist CE providers in assessing CE needs to design effective CE programmes that will meet

actual needs for university library practitioners, including managers and operational staff, in Vietnam.

Reference

Nowlen, P. M. (1988). A new approach to continuing education for business and the professions: The performance model. New York: Macmillan.

UCSC Nexus Project: Fostering networking between academic scholars and library staff. Qualitative methods for assessing perceived value of library services

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Abstract. Looking for excellence in library services and fostering closer and better relationships between academic scholars and library staff is a major ongoing trend. According to that, the library of the Catholic University in Milan is promoting a pilot project – codename Nexus – aimed to:
  ✓ designing, implementing and delivering a "one stop information shop" for internal researchers, bundling together homogeneous resources and tools,
  ✓ carefully selecting and optimizing available services, with a clear understanding of users' behaviour and with a project perspective (e.g: helping scholars in producing high quality educational material)
  ✓ In order to do so, we are in the process of developing suitable qualitative methods, enabling us to assess the perceived value of library services, through a close relationship with a selected panel of scholars, giving a structured feedback about:
  ✓ "dos and don'ts" when introducing new services in an academic library context
  ✓ scope and scale economies gained in releasing a defined range of "research deliverables" (e.g.: educational materials, bibliographies, papers)
  ✓ cost/benefit analysis of new services, in terms of effective usage
  ✓ Expected major benefits for the library will include:
  ✓ deeper understanding of effective users' needs and qualitative evidences about perceived value of new services (including spending rationalisation)
  ✓ improved partnership between administrative staff and the internal research community, leading to a better academic climate
  ✓ increased support to library innovation initiatives, including necessary resources (mostly in the human resources and technology areas)
Keywords: innovation, partnership, perceived value, qualitative methods, rationalisation

References

Steiner, Heidi M. and Holley, Robert P.(2009), *The Past, Present, and Possibilities of Commons in the Academic Library*, "The Reference Librarian", 50: 4, 309 — 332.

Harrington, Sara(2009), *Librarians and Undergraduate Thesis Support: An Annotated Bibliography*, "The Reference Librarian", 50: 4, p. 397 – 412.

Vitiello, Giuseppe (2009), Seven years after the Open Access revolution:(research) libraries as media and knowledge management centres, "BollettinoAIB", 2 p. 171-179.

W. Miller, R. Pellen (2005), Libraries within their institutions: creative collaborations, Binghamton, NY, Haworth Information Press.

Kraat, Susan (2005), Relationships between teaching faculty and teaching librarians, Binghamton, NY, Haworth Information Press.

Biddiscombe, Richard (2002), Learning support professionals: the changing role of subject specialists in UK academic libraries, "Program. Electronic Library and Information Systems", 36, 4, p. 228-235.

Lupton, Mandy (2002), The getting of wisdom: reflections of a teaching librarian, "Australian Academic & Research Libraries", 33, 2.

Pinfield, Stephen (2001), The changing role of subject librarians in academic libraries, "Journal of Librarianship and Information Science", 33, 1, p. 32-38.

Unifying information behaviour and process: a balanced palette and the balanced scorecard

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Abstract. This paper is an application of a new conceptual model developed by Foster and Ferguson-Boucher during 2009-2010 at the University of Aberystwyth. The work builds on Foster's model of information behaviour (2004; 2008), and is informed by Upward's continuum theory (1996; 1997).

Taking information behaviour and the palette of opportunities discussed by Foster's earlier work (2004), this development allows analysis of the different roles and processes associated with information and knowledge handling at the levels of individual, team and organisation. The model will be described briefly as a background to our application of the model to practice as a data collection and analysis framework. As part of this the components of the model are to be unpacked. A major feature of the model is the principle of a balanced palette that enables analysis and interpretation of information and related processes. The balanced palette approach potentially allows us to evaluate roles, functions and processes, taking into account the natural and evolving behaviour of people and their relationship to information, knowledge, and technology.

In seeking to fully develop the palette approach Foster and Ferguson-Boucher identified compatibility of the processes that were to be measured with the Balanced Scorecard (BSC) technique. As one of the few tools enabling strategy to be aligned with key business drivers, the Balanced Score Card, originally developed by Kaplan and Norton in the 1990s and subsequently extended (Broady-Preston, 2005). The BSC's strength in this context is in bringing a structured approach to evaluating information processes and strategy. Its relevance and significance vis-à-vis information processes and context was identified in research by Broady-Preston in the mid to late 1990s (2005).

Taking together the palette approach to information behaviour and processes, and the technique of the balanced scorecard we put forward some outlines of how they might be used to explore and evaluate a range of information situations.

References:

Broady-Preston, J. (2005). "The Balanced Scorecard, strategy, information and intellectual capital." In: Introducing Information Management: An Information Research Reader. (eds. Elena Maceviciute and T.D. Wilson), pp123-136. Facet Publishing: London.

Foster, A., Urquhart, C. & Turner, J. (2008). "Validating coding for a theoretical model of information behaviour". Information Research, 13(4) paper 358. [Available at http://InformationR.net/ir/13-4/paper358.html]

Foster A.E. (2004). A nonlinear model of information seeking behaviour. Journal of the American Society for Information Science and Technology, 55(3), 228-237.

Upward, Frank. (1996). "Structuring the Records Continuum - Part I: Postcustodial Principles and Properties." Archives and Manuscripts 24(2) (1996), 268-285.

Upward, Frank. "Structuring the Records Continuum - Part 2: Structuration Theory and Recordkeeping." Archives and Manuscripts 25(1) (1997), 10-35.

The University Library as Strategic Investment: Results from the "Return on Investment" Study, Phases I & II
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Abstract: How can university libraries demonstrate their value to the institution in easily articulated quantitative terms that focus not on inputs, but on outputs and impact? This paper reports on a "Return on Investment" study undertaken at the University of Illinois at Urbana-Champaign that sought to measure the return on the university's investment in its library, as well as a follow-up (Phase II) study involving eight institutions worldwide. Both phases of this study sought to develop a quantitative measure that indicates the library's value in supporting the university's strategic goals, including the impact of electronic resources on faculty productivity and grant funding. The results of this study represent only one approach to the challenge of representing the value of the library in higher education, but can be a key component in telling the story of the benefits of investing in academic and research libraries.
Keywords: Academic Libraries, Return on Investment, Academic Library Assessment

Usage as an Acquisitions tool, is it valid?
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Abstract: All over the globe Academic libraries are fighting the budget cuts brought on by the financial crisis and one of the most common ways of making ends meet is cancelling the least used products.
However as recent research shows that users in many cases are abandoning the library in favour of open web search engines like Google, this might be a very dangerous policy for the future of the academic library – is the present usage statistics really reliable enough to make such big decisions? And wouldn't it be better to try to make the users actually USE the already paid for library content?
Keywords: Acquisitions, Academic libraries, Driving usage, Google, Financial crisis

Usage statistics for online resources made available by libraries through portals: the INIST-CNRS example
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Abstract. The Institute for Scientific and Technical Information (INIST), a unit of CNRS, France's national scientific research organization, is in charge of negotiating, on behalf of CNRS, with publishers and producers access to the electronic resources (journals, databases, added-value services) contained in INIST's various information portals. INIST-CNRS is also in charge of the technical implementation and management of these portals. It provides publishers with a single IP address by portal and manages password and authorized users' logins of each CNRS unit. To know more about how the portals' content is used, and in particular to fill the existing gap in terms of lack of data between resource usage (articles accessed) and resource user (scientists and laboratories accessing these articles), INIST

started developing its own internal statistics, based on publishers′ data, CNRS user directories and internally observed logfiles. The obtained data prove to be more homogeneous and more exhaustive than the ones previously received from publishers. Most importantly, they enable to have a closer look at costs related to usage. The presentation will focus on how these statistics are established and handled by INIST, on what kind of data INIST collects and why, and how they are analyzed.

The use of Marketing Research methods for the evaluation of Information Literacy services

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Abstract. In recent years, services provided from any organization are being evaluated in terms of their necessity for the aims of the organization and libraries can be no exception. Many library researchers have used marketing methods, such as quantitative and qualitative research, in order to focus attention on expectations and quality, capturing the userB s perspective on services used. Quantitative research is a method where the data are in the form of numbers and can be counted or measured. On the other hand, qualitative research involves in-depth investigation. It pays more attention to individual cases and looks further than precise numerical evidence.
The Central Library of the National Technical University of Athens conducted a quantitative research in order to evaluate the services provided within the concept of Information Literacy. Quantitative research was chosen for various reasons. It can state the research problem in very specific terms, making possible to evaluate specific and predetermined services provided. It is considered to be very reliable due to mass surveys and finally, it is a method that enables comparisons across categories, which was essential in this situation.
However, both qualitative and quantitative methods are necessary. Both methods are used to combine a general picture of the study. In the case of the Central Library of the National Technical University of Athens, the need for evolvement in the existing Information Literacy services requires the use of qualitative research methods, since it provides an initial understanding for further decision making and enables to generate ideas for further research. As a result, the Central Library of the National Technical University of Athens aims to conduct a qualitative research, using focus groups, in order to identify unexplored user needs and library shortcomings through the suggestions of the members of the institution.
Keywords: Quantitative research, qualitative research, Information Literacy, evaluation method

Usefulness in Digital Libraries B? What do Users Need?

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Abstract. In our conference paper we will present the result of a survey conducted in collaboration between the project ACCEPT of the Geneva School of Business Administration and the Libraries of the University of Geneva. The objective of ACCEPT is to ensure the aspects of usefulness and usability within the project E-lib.ch, the future Swiss digital library. The survey is a case study and should be adoptable for all E-lib.ch projects and accordingly to scientific libraries in Switzerland. It is part of two other B?sub-projectsB? of ACCEPT which covers together the different aspects of usefulness: the technical, the librarianB?s and the

usersB? view. On one hand, the aspect of Web analytics should help to understand whether users find the electronic resources at University of Geneva and which way they choose. On the other hand, a framework for librarians should help them to evaluate de usefulness of digital services without consulting the users every time. Finally, the survey questions the users and asks them for what they want and need.

To get back to the survey: It contains three parts. The first one concerns de profile of the users, the second one their behaviour (which resources do they use, how often, do they prefer printed or electronic resources etc.), the last one the usefulness of the resources. The responses will help to create personas, fictional characters that represents the users and their needs and actions. Personas are described in detail including attitudes, goals, skills, environment, as well as some fictional details to make the persona a more realistic character.

As the aspect of usefulness is often forgotten or misleadingly seen as inherent to the usability-process during the evaluation of digital services, the results of the survey points out its importance and gives evidence for treating it separately. It is necessary to understand that a service that isn't useful will not be used.

Keywords: usefulness, digital services, digital library, survey, personas

User and Non-user Studies: A Bibliometric Research Project
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Abstract. Studying user behavior is an essential component of determining successful delivery of services and materials to library patrons. The study of non-users can be of equal importance in fulfilling the mission of a library within a community, yet more difficult to accomplish due to the necessity of determining in advance who those non-users might be and where they might be found. The aim of this research project was to determine whether studies of non-users of library services are underrepresented in relationship to the number of user studies, using bibliometric methods. In addition, this study looked into various publication patterns of user and non-user studies, in the hope of encouraging library and information professionals to undertake use studies in areas determined to be lacking, thus contributing to the overall body of professional knowledge.

User centred libraries and Brand Name: the case of Greek public libraries
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Abstract. The paper aims to discover the public libraries attitude on strategic planning. Especially, it aims to seek three axes of interest:
- ✓ How public responses to the services provided by libraries,
- ✓ If libraries use promotion methods and strategies to reach their potential users,
- ✓ If libraries examine the causes of its low popularity.

The crucial concept of these themes is relevant to the brand name of the library and how she manages it.

The paper is based on a pan-Hellenic survey that was taken place last year and included both questionnaires and interviews. It also uses the literature on brand name and libraries' policies on how to attract non-users. That's the important point for libraries to determine the opportunities for effectiveness and the threatened of the introversion.

Keywords: library marketing, brand name, strategic planning, non-users,

User preferences for virtual information retrieval : a qualitative study

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Abstract. This paper describes a study undertaken with the intention of discovering user preferences as to the design of virtual worlds for use as interfaces for information retrieval. This article presents results of a piece of research conducted in order to determine user preferences as to the nature of virtual worlds to be used as an environment for information retrieval. A review of the literature had determined that this was not the conventional approach to design of virtual worlds in this area, and in order to redress this situation, a study was carried out amongst postgraduate students and staff at Robert Gordon University, using a Grounded Theory methodology. Over one hundred interviews were carried out, in three cycles of interviewing, analysis, and integration with literature. The first round was concerned with finding out what ideas for a world design people would have, the second with testing four worlds derived from the first round, and the third with exploring further ideas that users had, based on their experience of the test worlds.

The findings revealed that user preferences were determined less by structural features than by affective factors, such as familiarity, organisation, assistance, and quality of information and presentation.

It was found that the results provide a theoretical underpinning for practices such as the provision of –conventional- library structures in the popular online environment Second Life.

This was not a statistical exercise, but it would appear that there are no significant differences based on the criteria of age, gender, or whether a user was staff or student.

Keywords: virtual worlds, information retrieval, grounded theory, user study, VRML, 3D, qualitative study

User Pre-Online Searching and Search Success: Modeling User Search Terms Selection Behaviours

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Abstract. A study was carried out to explore how search terms were selected by users in retrieving information from online databases. The grounded theory approach was adopted to analysed data gathered through semi-structured interviews that looked at users' searching behaviour. Respondents were selected from among postgraduate students who are library users of selected Malaysian public institutions of higher learning. It was discovered that information tasks dealt with during pre-online searching contribute towards the appropriate development of search terms. Three categories related to search terms development during pre-online information searching emerged during the analysis, namely Conceptualising, Expressing and Selecting. The study limits itself to modeling user behaviour during pre-online searching stage. The results provide a basis for the development of personalised and user-centred online search interfaces which could facilitate users starting from the crucial pre-searching stage. This study provides current understanding that extends the ways in which users formulate initial search terms as well as establishes the importance of search terms selection during pre-online information searching. It promotes that the exhaustiveness in formulating initial search terms at the pre-searching stage ensures better search results.

Keywords: Information retrieval, Information searching, Pre-online searching, Search terms selection, Grounded theory

Users' Perception and Satisfaction with Reference Services in University Libraries of Punjab: A Survey

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Abstract. User satisfaction and optimization of resources have become important areas for libraries to maintain awareness of. Many libraries especially the university libraries are focusing on evaluation of the users' needs and their satisfaction with their services. User satisfaction surveys can provide useful perceptions of service quality in libraries. Providing quality reference service is not easy, and any approach needs constant evaluation. By knowing of users' perception and satisfaction, libraries can tailor those services according to their needs. Keeping the importance of reference services in view many studies are conducted in the developed world, but in Pakistan the situation is not encouraging. Very few studies are conducted to find out the status of reference services in different libraries of Pakistan but there is no data available on user satisfaction with reference services of university libraries.
Keeping the gaps and need of the time in view, the basic purpose of this survey will be to gather a broad understanding of how do users perceive the reference services. It will also explore their satisfaction with these services. The survey will be limited to all public sector university libraries (N=10) of the Punjab province (Pakistan) having a reasonable collection, staff, and separate reference section, as well as a reference librarian. The data will be collected through mail, e-mail and personal visits. Findings of the study will be helpful for the library authorities and professionals for revisiting their reference services and sources
Keywords: Pakistan, Reference and Informational Services, Punjab, University Libraries, User Satisfaction.

Using Data to Make Quick Decisions about a New Merged Service Desk: A Case Study

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Abstract: The Robert W. Woodruff Library at Emory University is working on a project to merge its reference, circulation and technology help desks into one service point. The timeframe to implement this project is very short. Therefore, reference staff, working with circulation staff, has developed quick methods to analyze existing data and quickly gather new data to help inform decision-making about staffing levels, training, and a location for the new service point. This paper is a case study detailing some of the methods and processes used by staff to make decisions.
Keywords: simulations, reference desk, merged service desk, data collection, Wordle, service desk location

Using Qualitative Approach for a Psychographic Segmentation of the users of library services – A methodological experiment

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Abstract. The paper reflects on the methods used to carry out user segmentation and the positioning of library services in comparison to other forms of cultural offers through the use of the qualitative approach. The reflection is based on the results of an in-progress investigation into the users of four libraries belonging to the City Library Network (one main library and three satellite public libraries) in Perugia, a city in the centre of Italy with 160,000 inhabitants. On an operational level, the investigation foresaw the use of questionnaires, face-to-face interviews and focus group interviews. Regarding user segmentation, specifically the possibility to simplify the market (in our case both real and potential) by dividing it into the most homogeneous segments of users possible and also the most different, we are encouraged to enquire if when examining libraries, like other forms of cultural consumption, the socio-demographic variables are still efficiently discriminating.

Demographic and socio-economic variables, such as age, gender, income and social class, widely used in analyses of library service users due to the fact they are easily accessed and inexpensive, nowadays risk being considered out-dated, as their treatment of user needs and desires is superficial and leaves a discrete margin of imprecision in dealing with the advantages and disadvantages of library services. Using qualitative survey techniques, our aim was to carry out a psychographic segmentation of the library user which would allow us to identify within the potential user basin homogeneous groups characterized by a shared image of what the library represents to them, sharing similar tastes, perceptions and habits, to whom the library can offer made-to-measure services through appropriate strategies in line with their preferences and expectations.

Keywords: Grounded Theory, Qualitative Method, Interview, Focus Group, Psychographic Segmentation, ATLAS.ti

Using qualitative research within a virtual community of masters and doctoral students to establish their information recording behaviour

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Abstract. Masters and doctoral students are expected to demonstrate advanced research skills with regard to identifying, evaluating, storing, recording and using retrieved information and information sources for their research. In this paper the focus will fall on how supervisors and information specialists (librarians) can effectively work together to develop one of the most neglected skills in the research process, namely "information recording". Information recording is defined as the actions of the researcher to systematically develop and record pointers to those relevant sections of already published information, and which might be used during the literature review stage of the student's thesis or dissertation. Such pointers might refer to information stored on the researcher's computer, to information sources available in his/her research library, or might be pointers to external sources via hypertext links. This important phase of the research process implies far more than merely finding and copying full text documents to the researcher's computer. Information recording implies that the researcher

uses a system to systematically build up pointers representing the content of a thesis or research report whilst the researcher reads (studies) relevant information sources for the literature review. The author's 'multi-tier keyword' approach, together with mind mapping concepts and software are being put forward in this paper as a mechanism to develop pointers in the information recording phase of research.

Furthermore, when supervising advanced post-graduate students at masters and doctoral level from within a virtually community of practice (VCoP) and involving the information specialist within such a closed network, much can be contributed to the quality of the information seeking habits of postgraduate students. As a starting point (for example for recently enrolled masters or doctoral students), anyone of the familiar information behaviour models can be utilised to design and post an open-ended questionnaire to the VCoP. The information specialist, who is a recognised member of the VCoP, will now have direct access to the information behaviour and information needs of the specific group. "Information recording" skills (or lack thereof) can now specifically be studied by the supervisor and information specialist working as a team.

This paper will demonstrate to what extent a VCoP is the ideal environment to mentor masters and doctoral students in certain aspects of their research (for example identifying a research problem, selecting investigative research questions, or writing a literature review). It will then focus on information recording techniques, by demonstrating how mind-mapping techniques can provide in the most effective way to record or store information segments by means of multi-tier keywords (all these are part of effective information recording). The advantages of incorporating the information specialist within a VCoP will be discussed, of which the prevention of plagiarism is probably the main achievement..

[1.] See a description of the more important models in Wilson, T.D. (1999). Models in information behaviour research. Journal of Documentation, 55(3),249-270. Available at http://informationr.net/tdw/publ/papers/1999JDoc.html

Using statistics B? quality management in the library
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Abstract In the light of the ever changing and developing technology in the libraries, library managers all across the sector and over the world need to utilize all possible means of ensuring that the quality of services remain optimal. This paper shows some of the uses of different evaluation tools in an academic library. The paper will describe the practical use of surveys, larger and smaller, questionnaires, focus groups and stake holder meetings, all of which will yield different kinds of data. As part of quality management, the practical uses of this data will be explored.

Keywords: Evaluation tools, surveys, service quality, quality management

Variation of performance in the new national / European / worldwide socio-economic context - "diagnosis", "causes" and "treatment" (the case of a Romanian university library)
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Abstract. „Mihai Eminescu" Central University Library, one of the largest (over 2.4 millions bibliographic units) and one of the oldest libraries in Romania (1835) has the role to create, organize, process, enrich and host collections of books, serials, articles, electronic publications, as well as to create the informational environment in order to support the

educational and research activities of the university life in Iasi, expanded to national and international level.

In 1998, the first standard that measures the performance of a library was published (ISO 11620). Four years later, focusing on end-user information needs, the Central University Library Iasi have evaluated, quantitative and qualitative, the activity of the library by calculating and analysing library performance indicators, in order to improve outcomes and to increase competitiveness.

The evolution of the library has been studied over seven years by comparing the values obtained when evaluating services such as market penetration, provision of documents, use of traditional library services, human resources and costs of these services. Performance measurement has really supported library's managers to take the best decisions. The last years, the economic crisis has had a major impact on the budget of the library. Moreover, introduction of *digital technologies and documents* have necessitated the use of specific evaluation methods for this new type of library **(2006: ISO 2789 -"International library statistics"; 2008: ISO 11620)**. The maintenance of a high level of results was a major challenge for our specialists in information science. We had to understand **what happened** and **why**, to identify *"the dangers that threaten the performance of the library"* and **what can we do** to overcome them and **to adapt to changes**.

To get the best results, a professional approach, an automatized system of collecting and keeping data (ILS – ALEPH), a rigorous interpretation of them, a thorough knowledge of international standards and a lot of enthusiasm are needed. Furthermore, I think this shared experience might be useful to all, wherever they are, and proves that statistics can be considered attractive.

Keywords: university library, library statistics, library performance indicators

View from a Virtual Reference Desk
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Abstract: A number of articles have been published in recent years relating to the field or embedded librarian. In addition this changing model of librarianship, many more librarians are working a virtual world with users approaching them through chat or IM reference sites and e-mail. What are the other ways in which reference can be provided in the virtual world, and more importantly, how do we assess these avenues? This paper will discuss the variety of tools that are available to the librarian who works without a physical library and explores efficient and effective ways to assess of virtual reference that are both quantitative and qualitative.

Keywords: Reference, Assessment, Embedded Librarian, Virtual Reference Desk

Webometrics study of impact of Iranian Medical Sciences Universities
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Abstract: One of the most important features of the web is that web pages can be easily connected by linking them to each other. Links provides easily access to the relevant information on the Internet. The academic websites in countries are the most important Internet communication tools. They introduce universities, their related institutes and departments, their resources and services, faculty members, students, and so on. Nowadays,

an important factor for the success of a university is its website and web accessibility and in particular its visibility on the web. Therefore, it is important to evaluate their presence on the web. Web Impact Factor (WIF) is a new system of measurement and an important metrics for assessment of university websites and their formal and informal impacts. In this study we investigated the WIFs of Iranian Medical Sciences Universities. The number of web pages, inlinks, and also the pure web impact factors for Iranian universities of medical sciences websites were calculated and compared using AltaVista search engine. Finally, results were compared for impact, visibility, and influence of Iranian Medical Sciences Universities. Results revealed that Iranian universities of medical sciences did not have much impact on the web.

Keywords: Medical sciences Universities, Webometrics, Iran

What time do you close? Determining library services with an evidence-based approach
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Abstract. In a world where students demand 24/7 access to study space how do library leaders in small institutions with limited financial and human resources respond to this challenge? The theme of this session is to examine how the collection and analysis of qualitative and quantitative data can help shape and direct the delivery of the specific and often challenging service of library hours. At the Ferriss Hodgett Library, a small university campus library in Corner Brook, Newfoundland, Canada we used a variety of data including LibQUAL, quick polls, usage statistics and user comments to inform our decision making processes. The result has been a expansion of hours, greater staff involvement in the provision of library services and the development of a process of working with data that can be used when evaluating other library services or proposing new ones. Attend this session to find out how we gathered and examined the data to help provide a better service for our students and to expand our communications with them.