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Plenary Talks - Special Sessions – Workshops

1. Plenary Speech

Digital Scholarship Centers: Transforming Research Using New Media

Sohair Wastawy, Ph.D., Dean of Libraries, Florida Institute of Technology, USA

Abstract: As research practices change to incorporate new technologies, it's important for libraries to provide the new scholarship tools to faculty and students and offer expertise and programs that support users at all levels. Unlike in university labs, the availability of high-end technologies in the library offers an opportunity for the entire university scholarly community to use new tools that enhance their learning. Such availability will not only help students and faculty explore new technologies, but will also encourage cross-disciplinary cooperation and promote campus-wide innovation in research, teaching, and learning. The new Digital Scholarship Centers enable users unfettered access to new tools, new services and the expert help to take advantage of them resulting in new opportunities for discovery and learning.
This presentation aims to inform attendees about this major development in academic libraries and share the successful implementation of a Digital Scholarship Lab at Florida Institute of Technology Library.

Dr. Wastawy has been Dean of Libraries at Florida Institute of Technology since October 2013. Before arriving to Florida Tech, Dr. Wastawy was the Dean of the University Libraries at Illinois State University. From 2004 to 2010, Dr. Wastawy provided leadership for a full range of library and cultural activities as the chief librarian of the new Library of Alexandria in Egypt where she was instrumental in founding and building the programs the Library of Alexandria offers today. She also worked as the Dean of Libraries at Illinois Institute of Technology (IIT) from 1992 to 2004 and was affiliated with IIT since 1988 where she was as an Information Specialist and Library Director for the Center of the Study of Professional Ethics until 1992. Prior to her work with IIT, Dr. Wastawy was a lecturer in Saudi Arabia and Egypt, respectively. She currently serves as member of the Executive Committee of the Qatar National Library and has been a member of a number of professional boards and associations and a recipient of many awards and honors including a Fulbright scholarship. She is also an international consultant for library buildings and management.
Dr. Wastawy received her BA, MA, and completed work towards her Ph.D. thesis in Linguistics at Cairo University, Egypt. She possesses a Master's degree in Library and Information Science from The Catholic University of America, Washington DC, USA and a Doctorate degree in Library and Information Management from Simmons College, Massachusetts, USA.

2. Plenary Speech

Library Worldviews, Designs, and Methods: Mixed Methods Simple and Complex

Martha Kyrillidou, Ph.D., Consultant, Research Associate at the University of Illinois, Instructor at Kent State University, USA

Abstract: We need to be creative in how we deal with the issues of accountability and assessment! If the world may have one library while at the same time the world may have 3 million libraries in 2100 as O'Donnell predicts, what are the quantitative and qualitative approaches that will help us articulate the value of the one universal library and the value of the three million library communities at the same time? What is provoking new thinking about library assessment? What are some key trends that are influencing what we are doing? We know the world is complex and mixed methods research approaches are a reflection of this complexity. We need for assessment to involve multiple methods in a consistent manner yet creative. We need both qualitative and quantitative measures – outcomes aren't enough and transactional surveys aren't enough on their own. We all engage in learning through some way of engaging our worldviews, developing designs, and deploying methods almost all the time. Many such methods are simple enough to do without expert advice yet others must be used with some care and require deep expertise. Every librarian and every library can do assessment with some thought to enhance the ubiquitous capacity for our user communities to access information and services in improved ways.

Martha Kyrillidou consults in evaluation, assessment and R&D activities. She helps libraries respond to customer needs through the development of user-focused services and culture that enhance the user-experience. With an understanding of trends in services, collections, facilities, and personnel she can help a library tell their story through narratives, visuals and numbers. As the original architect of the StatsQUAL suite of services at the Association of Research Libraries (ARL), Martha can consult and help you maximize the benefits you derive from LibQUAL+, ClimateQUAL and MINES for Libraries. She has also worked on digital library as well as special collections assessment and evaluation methods. Her work has defined the growing and dynamic library assessment community of practice. She can help you with accreditation, grant writing, evaluation plans or serve as your external evaluator and data analyst for your grant and sponsored activities. Martha is a Research Associate at the iSchool at the University of Illinois, Urbana-Champaign, bridging research and practice. She teaches Research Methods at Kent State University. She is on the planning committee of the 2016 Library Assessment Conference and co-chaired the previous conferences. For 22 years she led the ARL assessment programs. In 2003 she spearheaded the development of the StatsQUAL gateway to library assessment tools at ARL that includes LibQUAL+, ClimateQUAL, MINES for Libraries, DigiQUAL and LibValue in addition to the ARL Statistics. Martha has published widely and is available to present, conduct training, and facilitate strategy development. She has a PhD from the University of Illinois at Urbana-Champaign and two master's degrees from Kent State University, one in library science and a second one in evaluation and measurement. Her undergraduate degree is from

Aristotle University in Thessaloniki, Greece. She can also be located at marthakyrillidou.com (forthcoming).

3. Plenary Speech

Making Open the Default in Scholarly Communication, and the Implications for the Future of Libraries

Lars Bjørnshauge, Consultant SPARC Europe – www.sparceurope.org, Managing Director DOAJ – www.doaj.org

Abstract: The presentation will explore how recent developments and expected changes in scholarly communication (i.e. Open Access to Publications, Access to Research Data and Software) should or could influence the shaping of the future Academic Library
Since academic librarians and libraries have played a major role in the growth of open access, the developments are not a cause and effect relationship, but more a landscape of opportunities, where libraries can play an even more central and important role in education and research processes.

Lars Bjørnshauge – short bio:
Currently: SPARC Europe Director of European Library Relations and Managing Director, DOAJ (Directory of Open Access Journals.
Past:Deputy Director, Acting Director, Technical Information Center of Denmark Technical University of Denmark (1992-2000), Director of Libraries at Lund University, Sweden (2001-2011). President of the Danish Research Library Association 1992-1994.
1st Vice-President of the Swedish Library Association 2005-2011.
*Founder of the Directory of Open Access Journals (www.doaj.org), co-founder of OpenDoar, the Directory of Open Access Repositories (www.opendoar.org) and co-founder of the Directory of Open Access Books (*www.doabooks.org*).*

4. Plenary Speech

What Happens Next? Strategies for Building and Assessing the Long-term Impact of Research Projects

Professor Hazel Hall, Director of the Centre for Social Informatics, Edinburgh Napier University, UK

Abstract: The impact of research and its measurement is an important research topic, particularly at a time when value for money in public spending is paramount. Indeed in some geographies, such as the UK and Australia, consideration of impact has become routine in the process of developing research proposals. Here it is expected that the benefits of the proposed research to the economy, society, culture, public policy or services, health, the environment or quality of life beyond academia are considered in the context of research project goals. This puts an onus on researchers to identify the means of maximising the potential research impact of their work even before funding is granted.

Research completed by members of the Centre for Social Informatics at Edinburgh Napier University in 2011 concluded that impactful Library and Information Science (LIS) research enjoys high-level support, involves the participation of practitioners, and engages a dissemination strategy that takes into account practitioner preferences for consuming research output that is presented in an accessible way. It is also important that LIS practitioners are supported to engage with research by their employers and professional bodies.
The findings of this earlier work influenced the Centre for Social Informatics' delivery of AHRC-funded Developing Research Excellence and Methods (DREaM) project in 2011/12. The goal of this project was to develop a UK-wide network of library and information science researchers.
A follow-up study entitled DREaM Again presented an opportunity to measure the impact of DREaM three years after it ended. 32 of the 35 DREaM participants who attended all three of the research methods workshops (the core of the DREaM event series) completed surveys and contributed to focus groups in London and Edinburgh in summer 2015. The findings of this study revealed that since completing the programme the participants had (1) implemented new and innovative research methods and techniques in workplace environments; (2) disseminated relevant, high priority research output to inform policy, determine information services provision, and develop the future LIS research agenda; and (3) enhanced possibilities for the exploration of new research initiatives. It was also revealed that the members of this group continue to work together in a loose, but persistent, network across the UK. Other impacts of the DREaM project were also noted, such as the academic impact of the work disseminated by the cadre members, and uptake of the methods used in the delivery of the DREaM project events.
This closing plenary presentation at QQML 2016 will focus on strategies for building and assessing long-term impact into LIS research projects. The main messages will be illustrated by best practice in LIS research, with particular reference to lessons learnt from DREaM and DREaM Again.

Professor Hazel Hall is Director of the Centre for Social Informatics at Edinburgh Napier University, where she also holds the institutional role of Athena SWAN Academic Champion.
Amongst her external appointments, Professor Hall is Chair of the Panel Advisory Board of Research Councils UK's Digital Economy Theme. For further information, please see the longer profile at ***http://hazelhall.org/****.*

5. Plenary Speech

Collaboration and Co-operation: Designing Services for a Federated University

Jackie Marfleet, Senate House Librarian, University of London, Senate House, UK

Abstract: Senate House Library sits at the very heart of the University of London. Established in 1871 the Library has undergone significant change and continues to evolve to meet the needs of an international research community. In common with many higher education institutions, Senate House Library must rise to the challenge of innovating and delivering value-add services whilst not alienating its core user community. This paper will look at the evolving research landscape and the

challenges and opportunities this affords both Senate House Library and peers across the sector. The paper will discuss approaches for collaborating on joint initiatives and will cite current examples of projects in which the Library is involved.

Jackie Marfleet, formerly Head of Advice and Records Knowledge at The National Archives, has more than 20 years of experience in the library, information and knowledge management sectors. She has worked in both the private and public sectors and was previously the British Library's Head of Reference and Research. Jackie was appointed to the role of Senate House Librarian in April 2014 and is dedicated to facilitating increased collaboration between the Library and the national and global research communities it serves.

6. Plenary Speech

Trends and Challenges to Future Libraries: Exploring Research Approaches

Sheila Webber , Senior Lecturer & Director of the Centre for Information, Literacy Research, Information School, The University of Sheffield, UK

Abstract: What types of research approach and method could help librarians tell compelling stories about the value of libraries and librarians? Sheila Webber will explore the possibilities for moving beyond Key Performance Indicators, in particular considering the power of qualitative approaches such as ethnography, phenomenography and autoethnography, and mixed methods such as action research and case study.

Sheila Webber is a Senior Lecturer in the Information School, University of Sheffield, where she is Head of the Libraries and Information Society Research Group and Director of the Centre for Information Literacy Research. Her core areas for teaching and research are information literacy and information behaviour. She is a committee member of the IFLA (International Federation of Library associations and Institutions) Information Literacy Section and the UNESCO GAPMIL (Global Alliance for Partnerships on Media and Information Literacy) European chapter. She is an invited speaker on information literacy internationally, including presentations and workshops in Australia, Canada and 16 European countries. She has maintained the Information Literacy Weblog since 2005 http://information-literacy.blogspot.com (which is approaching 1.5 million page views). Sheila was recipient of the 2015 UK e-Information Group's Jason Farradane award.

7. Plenary Speech

The value of facet analysis as a general research methodology for modelling subject domains

Vanda Broughton , Department of Information Studies, University College London, UK

Abstract: The study examines the theory underlying faceted classification, how and where it has influenced classification and indexing practice, and what advantages it

brings to the broader activity of knowledge organization. The role of facet analysis as a general research methodology is considered, and how it compares with other content analysis tools as a means of modelling subject domains. The use of categories as the basis of text analysis is not confined to the field of controlled vocabulary design, nor to the discipline of library and information science. Facet analysis per se appears as a domain related methodology in a number of social sciences from the 1960s onwards and analytical techniques very similar to those used in facet analysis occur in other qualitative research methods such as systems theory and grounded theory.
The nature of the category and the categorization process is subject to development from its origins in Ranganathan's theory, and the faceted approach of the UK Classification Research Group uses a much larger range of basic categories, as do many faceted schemes constructed in the late twentieth century in Europe and the United States. More recent work on classification in the humanities identifies further categories, fundamental to the analysis of these disciplines. It may be said that, while the idea of the fundamental category is inherent in faceted work, the number and nature of the categories is open to interpretation, and in that case it is hard to see a significant difference from the analytical equivalents of PMEST in, for example, soft systems theory. In most of these methodologies there is a strong correlation between categorization and coding, and so we see in more interpretive content analytic techniques such as grounded theory. In contrast with faceted classification, where the purpose is to build a domain model using established theory, here the objective is to build the theory itself. Something more may be inferred about the epistemological basis of facet analysis: whether it is entirely rationalist in nature, or whether the act of analysis itself generates the categories necessary to provide the model.

Vanda Broughton is Professor of Library and Information Studies at University College London. She has been Programme Director for the MA Library & Information Studies, and until recently Graduate Tutor (Research). She teaches the classification element of the modules Cataloguing and Classification 1 and 2, and also the doctoral seminar on research skills and methodologies.
She is the author of three standard textbooks on classification, thesaurus construction, and the Library of Congress Subject Headings, as well numerous papers and articles on knowledge organization, particularly faceted classification. She is Editor of the Bliss Bibliographic Classification Second edition, and Associate Editor of the Universal Decimal Classification.

Special and Contributed Sessions

1. Session Title: Linking Research and Practice: The Synergies and their Relevance to Practice, Policy and Academia

Coordinator: Maria G. N. Musoke, Professor of Information Science and Former University Librarian, Makerere University, Kampala,Uganda, East Africa

Scope & rationale: In an era of partnership and collaboration, rapid advances in information technology, paradigm shifts in research, learning and teaching, the growing research information that is increasingly becoming open access and the demands from library users, there is need to build on the synergies to impact academic and research libraries' service delivery.

Practicing librarians who conduct research or LIS academics and researchers who do research related to the practice of academic librarianship are invited to contribute papers to this session. The papers should share research findings about innovative practices and experiences – what works and what doesn't - to enable the participants to learn from the best practices or avoid what doesn't work. The application of the research findings to library service delivery, policy and in academia will enrich the session.

2. Session Title: Issues in International Library and Information Science Education

Coordinators: Terry L. Weech, PhD, Associate Professor, Graduate School of Library and Information Science, University of Illinois Urbana-Champaign, and **Fredrick Kiwuwa Lugya,** Graduate School of Library and Information Science, University of Illinois Urbana-Champaign, USA, and Librarian I (Academic), Makerere University Library, Uganda

Scope & rationale: The main goal of this session is to expand our understanding of the trends in international library and information science education and training and how LIS schools may design more effective curricula that prepares internationally recognized LIS professionals. We envision quality assessment of LIS education and training to provide a critical opportunity to benchmark LIS education to allow for international recognition of equivalency of LIS degrees and the possibilities of an international program of LIS education. This session will discuss quality assessment of LIS education and the skills needed of information professionals within the scope of the topics outlined below:

1) Quality Assessment of LIS Education in Developing Countries
2) Quality Assessment of LIS Education in Developed Countries
3) Methods necessary to achieve International recognition of equivalency of LIS degrees
4) Possibilities of an International Program of LIS Education
5) Future of LIS Education in the age of digital information
6) Other topics as identified by a call for proposals

3. Session Title: Reimagining the Academic Library: Building a New and Renovating the Old

Coordinator: Brian Lym, Professor and Dean of University Libraries, Adelphi University, Garden City, New York, USA

Scope & rationale: Designing and redesigning academic libraries to meet fast-changing user expectations, which are not necessarily in harmony, pose a continuing challenge for institutions of higher learning. The building of new academic libraries and the renovation of existing libraries to meet the needs of students and faculty are not simply about the creation of new spaces and architecture: the design and redesign of the academic library for the 21st century is also about the transformation of services and the way the academic library defines itself to meet evolving institutional needs. Both the re/design of the academic library as a facility and as an organization are of critical concern.

Academic librarians, designers, architects, information technologists, campus planners and others who are researching issues concerning the design and renovation of academic libraries are invited to contribute papers to this session. The papers should be practical and highlight findings that are generalizable and useful.

4. Session Title: Bibliometric Research

Coordinator: Teresa S. Welsh, Ph.D., Professor of Library & Information Science, University of Southern Mississippi, USA

Scope & rationale: Bibliometrics, literally 'the measurement of books', includes the statistical analysis of information related to usage or publication patterns. More specific types of bibliometric research includes altmetrics (Web-based impact analysis that includes social media) and scientometrics (analysis of scientific literature). This session includes research such as publication pattern analysis, citation analysis, and content analysis of scholarly literature or Web sites.

Workshops

1. Workshop: From Reflection to Innovation: Using a Mixed Bag of Assessment Techniques and Action Research to Reinvigorate your Teaching

Giovanna Badia, Schulich Library of Science & Engineering, McGill University, Montreal, Quebec, Canada

Abstract: Teaching can be a positive or negative experience, which largely depends on the teacher's reaction to what happens in the classroom. Librarians teaching information literacy skills require a toolbox of different methods to critically reflect on their own instructional practices in order to continue to be dynamic and effective teachers, as well as to support their professional growth and renewal in this area.
Professor Stephen Brookfield, a prolific researcher in the field of adult education, proposes that teachers question their assumptions and critique their practices by examining their instruction through four lenses: 1) their own experiences as learners and teachers; 2) their students' feedback; 3) their colleagues' comments; and 4) the published literature. These lenses can help instructors identify their strengths and weaknesses in the content and delivery of their courses, which is the first step in performing action research to improve existing instructional practices. Action research consists of defining the problem/question to study in the classroom, planning the educational intervention and assessment, collecting data, analyzing the data, and reflecting on the findings to innovate or make improvements. The last step of action research brings us full circle, back to critical reflection. Brookfield's lenses and action research are frequently applied to teaching semester-long, credit courses, which is a different context than the standalone or one-shot information literacy sessions that librarians teach.
Through the presentation of case studies and use of hands-on activities, this workshop will demonstrate how librarians can apply critical reflection (using Brookfield's four lenses) and action research to their own information literacy sessions with the purpose

of reinvigorating their teaching. The workshop instructor will also present lessons learned from employing multiple assessment techniques in the same class (e.g., pretests, post-tests, peer-feedback activities, students' search strategies on their own topics, etc.). Participants will have the opportunity to critique their own teaching practices, work with different assessment tools, as well as create a personal plan for engaging in critical reflection and action research at their own institutions.
Workshop participants will learn how to:

- use different methods to critically reflect on their own teaching
- apply action research steps to test an educational intervention in the classroom
- involve colleagues, faculty, and students in information literacy assessment

Workshop duration: 2 hours

2. Workshop: A Simple Mobile Interactive Lab for Experiments (SMILE)

Dr. Peiling Wang University of Tennessee, Knoxville, USA

Abstract: This workshop will present and demonstrate a design of a mobile usability lab that can be set up with a shoestring budget. The lab in a bag is ready to go where the participants prefer; thus the study setting for data collection will be natural and comfortable to the participants. Research design using this method for data collection and data analysis will be discussed.
Keywords: Mobile Usability Laboratory, Usability Observation, User System Interactions, HCI, User Studies
Description
Studies of Web users interactions are typically conducted in a usability lab equipped with computers, Internet connections, and screen capturing software. Many potential participants of user studies are not able to come to the usability labs. (Users may be living in an assisted living community or home-bound.) We designed a simple mobile interactive lab for experiments (SMILE)—a usability lab in a bag. SMILE is easy to set up using 4G mobile technology or Wi-Fi to access Internet. The system includes a laptop installed mirroring software ($15-$63) and screen capturing software ($99 - $399). The laptop will be used by the researcher to observe the sessions. A mobile device (tablet or smartphone) will be used by the user participant to search the Web or use an application.
This workshop will cover the purpose of observing users' interactions in finding information or using mobile tools, research design for such studies, data collection techniques, and data analysis tools.
The presenter will describe and demonstrate how to set up SMILE. Workshop participants will learn how to use SMILE to observe human-computer interactions and how to collect and analyze data.
Workshop participants will have the opportunity to propose scenarios for observational studies using SMILE. The presenter will select one or two proposed study scenarios to draft a research design that the participants can adopt.
A handout about the method will be provided at the workshop.
Workshop duration: 90 minutes

3. Workshop: The Emerging Innovative Models of Scientific Publishing: Are We Ready to Manage New Digital Entities?

Dr. Peiling Wang , University of Tennessee, Knoxville, USA and **Dr. Dietmar Wolfram ,** University of Wisconsin, Milwaukee, USA
Contributing presenter Ann Viera, Veterinary Librarian at University of Tennessee, Knoxville: "What should libraries do to facilitate researchers adopting OPR journals?"

Abstract: This workshop will deliver the current state-of-the-art in scientific publishing. Innovative open peer review (OPR) models have been proposed and implemented by pioneer publishers in the field of medicine, biology; compare the OPR journals implementing these models. Participants will join debate on the implications of the OPR scientific publishing in academics and libraries.
Keywords: Open Peer Review Models, Scientific Publishing, Innovations of Scientific Publishing, OPR, Interactive Peer Review, Collaborative Peer Review

Introduction

In the open science era, open access (OA) is a mature concept and practice in the field through Gold OA or Green OA model. Open peer review (OPR), on the other hand, is emerging in the field of scientific publishing. OPR models seek transparency and openness in peer review process. Peer review is the bedrock of modern science for the purpose of quality assurance in scholarly publishing. As a norm, academics rely strongly on peer-reviewed publications for their information needs and career advancements. However, the current blind peer review process as criticized by a former journal editor: "is a flawed process, full of easily identified defects with little evidence that it works." (Smith, 2006, p. 182) Today's rapid growth of publications creates new challenges in finding available qualified referees and reviewing carelessly prepared submissions that demand time for constructive comments.

Researchers are calling for innovation in peer review for today's big science. Interactive and collaborative peer review models can speed up scientific communication and assure quality. (Pöschl & Koop, 2008) Advanced Web technologies can support interactive & collaborative review models: dialogs between reviewer and author as well as readers. It is also manageable to discuss a submission synchronously (such as eLife). A five stars framework was proposed for online journal articles evaluation (Shotton, 2012).

Several OPR models are emerging:

1. Pre-publication editor designated peer review as a short-term evaluation (traditional model) –although a classic model, an article's peer review history may be published, if so chosen by the author; the reviewer may choose to reveal identity. (PeerJ)
2. Post-publication open peer review without editor (F1000Research)—a fully open peer review model in that peer review process is fully transparent: signed reviewer reports, author responses, and reader comments are all published as soon as they are made alongside of the article
3. Post-publication peer assessment of editorial peer reviewed publications as a long-term evaluation—identified peers can submit review anytime in a system of selected experts (e.g., F1000Prime)

All OPR journals are also Gold OA journals. Thus, either authors or institutions will pay for processing costs. There are also several models for pricing:

1. Article-based: by length (F1000Research: US$150-US$1,000)

2. Author-based pre-pay: lifetime membership of different levels (PeerJ: one article per year for US$99; two articles per year for US$199; etc.)
3. Institution-based plans: basic; enhanced; various models (more that 50 universities have signed up plans).
What are the implications of OPR journals for libraries?

Agenda

This workshop will be interactive combining presentations, breakout discussion, and reflective report.
Presentation. The presenters will introduce and discuss the current OPR models for scholarly publishing and compare the implementations of OPR journals.
Breakout session. The participants will be invited to debate on the implications of OPR journals for libraries:
What standards should be established to make OPR journals more manageable? How to define accessible unit for OPR journal articles that are integrated entities consisting of review reports, author rebuttals and data deposition. How to redesign or enhance information retrieval systems? How research should be conducted to identify best practices and to project the future of OPR models? How scholars publishing in OPR journal will be assessed? What should libraries do to facilitate researchers adopting OPR journals?
Reflective Summary. The organizers will report the outcomes of breakout session and propose further research ideas.

Time: 2 hours

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4. Workshop: New Public Management – Success Story or Just an Excuse for Cost-reduction in Libraries?

Prof. Dr. Petra Düren , Hamburg University of Applied Sciences, Department Information, Germany and **Jarmo Saarti,** University of Eastern Finland Library, Finland

Abstract: From the 1980's – in some parts of Europe from the 1990's - onward the new public management (NPM) has emerged in public organizations. Since then there has been a need to develop strategies, to plan budgets, and to implement cost and activity accounting as well as benchmarking to compare the library's processes, costs and activities with those of other libraries. One basic idea of the NPM was to make a transition from institutional function towards a product-orientation, to improve the quality of the library services, to develop output-orientation, and to act market and consumer-oriented. There also was a need to change from the bureaucratic and

hierarchically acting organizations to a more modern flexible and lean form of management.

Many libraries are faced with serious financial cutbacks on the one hand and with emergent needs to (re)invest in neglected public infrastructure on the other hand and what is more, they have to develop modern digital library services. Thus there is a need for efficiency, which is put in action via major budget cutbacks. Also many libraries have been closed down since the implementation of NPM ideas.

The aim of this workshop is to discuss if the NPM approach is a success story or just an excuse for cost-reduction in libraries.

We begin with two presentations: the first will describe the basic ideas of NPM, their realization in libraries and how libraries have to handle constantly reduced budgets and the risk of being closed down; the second presentation will show how the University of Eastern Finland Library has managed to improve its services with the new public management approach.

After this, we will discuss several topics related to NPM in libraries with the workshop participants.

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Abstracts

Academic Libraries and Student Taskscapes: Understanding the Student Experience through SMS Mapping

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Abstract: Research on undergraduate students' educational experiences demonstrates the importance of holistically understanding the complexity of students' life contexts to the development of university programs, services, and resources that effectively address students' needs. While investigating the local expression of these "taskscapes"--ensembles of interrelated social activities that take place across space and time-- at a particular university provides critical information about students' lived experience, few studies have sought to conduct cross-institutional comparison and analysis.

The "A Day in the Life" Project sought to address this gap through a multi-sited ethnography of students studying at eight universities representing a cross-section of the types of higher education institutions and diversity of the student body in the Unites States. Using an innovative mixed-methods approach to data collection that combined SMS message surveys delivered via students' mobile telephones and qualitative interviews, this study constructed a detailed map of each student's day, including the day's tasks and activities, the spaces and locations in which the student conducted academic research and day-to-day work, and how the university library fit within the student's overall educational experience.

This data enabled rigorous comparisons about how student needs vary within different institutional contexts, uncovered differences in experience associated with particular demographic variables including age, economic class, and university environment, and allowed the researchers to make recommendations for specific libraries to effectively respond to these needs.

Academic Libraries: Spaces to Readers Development to Improve Academic Skills

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Abstract: They are becoming more higher education institutions recognize reading and writing as a problem presented by students.

The reading activities that universities undertake to help solve problems and provide alternatives to raise and improve reading skills have been identified for the project Mapping Reading Institutions of Higher Education, of which Mexico is part of the activities of the International Network of Universities Readers.

Mapping is a methodology to locate and display space programs and activities and poryecto reading in universities.

In this context some academic libraries have developed several programs to promote academic and leisure reading, for their contributions, some have become university programs. It is an opportunity for these libraries participate in reading activities and training spaces are readers.

In this paper we present the mapping methodology and progress of the information collected which can be useful for university libraries

Keywords: Readers development for XXI Century, Reading promotion in university libraries, Reading cartography

Academic Use of Social Networks among Undergraduates in South East Nigeria

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Abstract: This work is an investigation into the Academic Use of Social Networks among Undergraduates in Federal Universities in South East Nigeria. In carrying out this project, five research questions were set to elicit answers to the research problem. The researcher used descriptive survey design which was considered most appropriate for this study. The instrument used for data collection was structured questionnaire. Population of the study was 51,336 undergraduate students from three federal universities in South East Nigeria in the 2012/2013 academic session. Multi-stage sampling technique was used for sample selection. The sample size was 400 undergraduate students from three of the five federal universities in South East Nigeria. A total number of 400 questionnaires were distributed and 398 were filled and returned for the study. Mean and Percentage were used to analyze the data collected. The three major findings of this research work are as follows: Out of the twenty social networks listed, only Facebook and Googleplus were accepted as the ones used by undergraduates; Students make use of only Facebook more than they use other social networks for achieving specific academic purposes listed. As a result of this, there is a serious need to create awareness that will bring to the knowledge of these students the existence and use of these social networks to improve their academic performance. Also, Students' engagement with social networks increases technology proficiency and enhances research skills. The major problems that hinder academic use of social 'network includes: Low bandwidth of the internet (slow internet), Addiction to non-academic uses inhibits academic uses, Poor time management and Lack of infrastructure like computers and laptops. The study also revealed that the following strategies can improve academic use of social networks: Installation of reliable and up-to-date anti-virus software to ward off attack from computer viruses, Upgrading of equipment to improve internet connection, Provision of facilities like generators and fuel or diesel to curb incessant power outages and Students must be disciplined to ward off distractions. Based on the findings, it was recommended that: Universities in federal universities in South East Nigeria should create adequate awareness to their students on the available social networks that can be used for academic purposes; Social networks should become a seamless part of the curriculum and not just an additional means of communication; These universities should also subscribe to a very high bandwidth of the internet in order to ensure steady and very fast network, Standby generators should be made available as an alternative to the epileptic supply of power by distribution companies and Students should discipline themselves to avoid time wastage and addiction as this can adversely affect their health as well as their academic performance.

Keywords: Social network, Academic use, Undergraduate students, Federal universities

Access and Use of Newspapers at Makerere University Library

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Abstract: The study examined access and use of newspapers at Makerere University Library (Maklib) as well as justifying the need for and against print newspaper subscriptions in light of the available online versions. The objectives were to: establish the most consulted newspapers, identify the type of information sought by newspaper users, determine users' preferences for print or online newspapers, and to identify challenges encountered by newspaper users. The study adopted a mixed methods research design. Data was collected using documentary review, questionnaires and interview methods. Convenient and purposive samplings were used to collect data from newspaper users who were assumed to be well versed with the topic under study. The study established that participants had different reasons for their preference of certain newspapers and versions. Reasons ranged from the quality of information provided to the language of the newspaper, the ease of access of a given newspaper and the infrastructure at Maklib. The study recognised the general IT infrastructure improvements at Maklib in recent years, such as the Learning Commons and the extended Local Area Network that has greatly increased online access, although the number of students tends to overwhelm the existing facilities. The study recommended that Maklib should reconsider its expenditure on print newspapers vis a vis subscription to online versions. A Return on Investment study on print newspapers at Makerere University was recommended as an area to consider for future research.

Keywords: Makerere Library, Print Newspapers, Online Newspapers, Access, Use, Academic Libraries

Access to Information and Information Practices in Clinic Libraries in Bucharest

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Abstract: In the context of new information and communication technologies and of the development of large electronic collections, access to medical information and the information practices of doctors have experienced a continuous evolution. Starting from results of previous research carried out by the author,which analysed the access to electronic information resources by the users of academic medical libraries in Romania and showed that a small number of library users surveyed prefer electronic information resources, this paper presents the results of a pilot study from a research whose purpose is to investigate the usage of medical information resources and the information practices of users in university clinic libraries in Bucharest through a questionnaire-based survey. The study found that the users from the clinics employ other information practices and a higher preference and usage of electronic resources. The results also underline the need for an increase of user training in accessing electronic information resources.

Keywords: Access to information, Electronic resources, Information practices, Information users, Doctors, University clinic libraries, Bucharest

Advancing Research for Library and Information Science with Qualitative Secondary Analysis

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Abstract: Qualitative methods prove useful for providing rich, interpretive, philosophical, and descriptive information about people and their lives (Creswell, 2007). This paper presents the results of a study that uses a rarely used method in LIS, Qualitative Secondary Analysis (QSA). In addition, it demonstrates the usefulness of this method for understanding and improving library practice. The study is a QSA of two phenomenological studies about the experience of work for reference and information services (RIS) librarians. Phenomenological analysis attempts to explain how things are experienced, rather than how they are measured or categorized (Vagle, p. 22). The two original studies sought to uncover how librarians experienced their lives at work. This QSA capitalized on the similarities of the original two studies, creating a larger and richer dataset for the focus of the secondary analysis. It sought to uncover the meaning of a specific aspect of work: the way that RIS librarians experience time at work. The results of the study have both practical and theoretical implications.

Secondary Analyses of quantitative data have been used in LIS (e.g., Crawford, 2015; Zhang & Kudva, 2014; Kwon & Kim, 2009, Whitmire, 2001); Johnson (2014) discussed its utility in LIS. However, we were unable to find studies that re-used qualitative data similarly to our study. QSA reuses or re-purposes previously collected data to "glean new social scientific and/or methodological findings…thus enable[ing] greater use to be made of qualitative data beyond the project which originally produced them" (Irwin and Winterton, 2011, p. 2 - 3). Re-using data makes sense; the processes involved in qualitative research (collection, transcription, etc.) are time-intensive and expensive (Dale et. al., 1988; Glaser, 1962, Smith, 2008). QSA has been criticized, though, because drawing conclusions from data collected for different purposes might introduce problems with validity (Boslaugh, 2007). This paper will focus on the method used for our research, then will discuss QSA in more general terms. It will explain strengths, weaknesses, impediments, and wider applications for the method within LIS research. We feel that this research approach is an especially important methodological advancement for library and information science studies and will support the future of librarianship by adding a greater understanding of both librarians' and library patrons' experiences.

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Altmetric and Bibliometric Scores: Does Open Access Matter?

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Abstract: Since new publishing models and new communication channels are being developed, recent information and communication technologies change the ways of scholarly communication. Traditional ways of measuring journal and article impact are not sufficient – besides bibliometrics (based on citation analysis), altmetrics arises as a new method based on quantitative analysis of mentions on blogs, in the news, shares on social networking sites, captures etc. The field of altmetrics is still new and further research still has to be done to find out if altmetric indicators are reliable quantitative measure of scholarly literature quality.
The main purpose of the study is to analyze the altmetric indicators for Altmetric top 100 articles (as recorded by Altmetric.com)in 2014, and to compare them with traditional bibliometric data for the same articles (number of citations in WoS Core Collection, Scopus and Google Scholar). The data from those databases was collected in January 2016. Also, altmetric scores for Open Access (OA) articles are compared to the scores for non-OA articles. As OA citation advantage has already been proven in numerous researches, this study wants to investigate if OA altmetric advantage exists. The research confirms low correlation between the number of citations (in the first year after publication) and the altmetric score. Nevertheless, the altmetric score has a potential role in promoting articles and getting post-publication evaluation and feedback. This research is a pilot study conducted on a small sample. It aims to test models and methodology for further larger studies. Results of the study represent one step forward to define altmetrics as a new way of quality control in scholarly communication, as well as in finding correlations between OA, bibliometrics and altmetric scores.
Keywords: Altmetrics, Bibliometrics, Citation advantage, Open Access, Social networking sites

Altmetrics as Alternative Tool for Measuring the Impact of Scholarly Documents Based on Readers attention: A Comparative Study

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Abstract: There is no suspect that scholarly journal articles have received a sufficient intention to measure their impact factor through counting the average number of citations to their contents. The conclusion of such measurement will be used to distinguish the highly cited journal, author or article from those which are poorly cited and counted of no impact. Recently, and with the explosion of the increasingly disseminated electronic content, alternative measurement along with the already existed traditional measure was required to measure the impact of scholars and

scholarly documents not captured by traditional bibliometrics, which are usually restricted to counting peer-reviewed journal articles and citations within them. As alternative measurement, Altmetric intends to use the Social sites on the Web such as ResearchGet, Mendely, to generate new measures of scholarly impact.
A sample of 10% of the highly cited articles in the topic of library and information science were selected from SCOPUS database during the period 2012-2014. Two research questions were stated and tested to measure the readers' intentions about the scholarly cited articles in social media, and to find out the correlation between the most cited articles (citation impact indicator) and the attention surrounding these articles (Altmetrics indicator)
Keywords: Bibliometrics, Altmetrics indicator, Citation measurement, Reader's attention measurement

Analysing and Mapping Cited Works: Citation Behaviour of Filipino Faculty and Researchers

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Abstract: Scholarly literature on citation studies has focused on understanding the relationship of two articles through citations and measurement of citation counts of an article; thus, citation behaviour in a simplified, linear relationship. Citing of sources involves complex behaviours which are influenced by a variety of subjective factors. This study identifies and describes the citing behaviours of faculty members of Ateneo De Manila University, De La Salle University, and University of the Philippines. Using ISI Web of Science and Scopus, a citation analysis was conducted on 8,652 English language journal articles published in 2007-2015. Citation Content Analysis (CCA) for syntactic and semantic analysis of contents, developed by Guo Zhang, Ying Ding and Staša Milojević CCA was also performed on single-authored articles of Filipino faculty members published in 2007-2015. The results of this study can yield valuable insights on how Filipino researchers cite sources which may be used for library collection development. **Keywords:** citation analysis, Filipino authors, referencing behaviour, citation content analysis

Analysis of the Slovenian Library Network: Spatial Simulations of the Library Locations and GIS Tool for Library Services Planning

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Abstract: Providing equal access to information to all citizens is the main principle for developing a library network in Slovenia. Ensuring equity of access for all citizens includes the geographical access. Compliance to spatial requirements in the Slovenian standards poses a challenge for Slovenian Librarians. Slovenia has only 2 million people, but they live in 6035 settlements and only 2.4% of them have more than 1500 inhabitants.
The geographical situation and the demographic change opened the doors for Library System Development Centre, the National and University Library of Slovenia to launch the project “Spatial analysis of the Slovenian Library Network”. They engaged

Urban Planning Institute of the Republic of Slovenia. The first phase started with the development of the methodology for calculations and refinement of the population, spatial and library data. Calculations of the distances to the nearest library on the road network were performed for each population cell. In the second phase the Library System Development Centre assessed the feasibility of the spatial requirements in the existing standards. The calculations resulted in the simulations of the optimal library network. Simulation had seven stages with different number of inhabitants in the catchment area of the potential new library.

Standards require that library service should be provided in a settlement with at least 1500 inhabitants where the distance to nearest library is 4000m and more. Results of the calculations revealed that 40.78% of the settlements need a library service. 27.62% of inhabitants live at the distance of more than 4000m from the nearest library. According to the spatial simulations Slovenia would need 87 new libraries to complete the library network as required by the standard. The demographic characteristic of the Slovenian territory also was recognized as an important factor in planning a library service. 16.65% of the inhabitants live in depopulated areas in the settlements with less than 65 people where the library service is further than 4000m.

The project provided also a web based interactive GIS application: accessible via http://nukgis.civitat.com/. The application is developed for librarians to facilitate their everyday work when assessing and planning the services. The application has map-centred user interface and displays the results of the project. Furthermore, librarian can easily perform some spatial analyses and reviews the libraries on a map. They can retrieve socio-demographic profile of the arbitrary catchment area by clicking a point or a route on the map. Each population cell displays data on inhabitants, the distance to the nearest library. From any population cell the routes are drawn to the nearest mobile, branch and central library. Each library service point is linked also with national library statistics.

Keywords: Spatial simulations of library locations, Library service planning, GIS tools, GIS web application

Application of RFID in Shaheed Rajguru College of Applied Sciences for Women Library, University of Delhi, India: Challenges and Future Prospects

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Abstract:

Objectives - The paper studied many aspects of the RFID application, its budgeting, purchase process and application. It also studied advantages and limitation of RFID Technology, Documentation and Financial Implication, Challenges faced in initial stage and remedies, RFID tag, RFID Gate, software, vendor selection. The library has taken many innovative steps to implement the RFID in a very short period of time and in less technical glitches. It also studied Database system with RFID technology, counting performance with RFID technology, Wrong-positioned book situation with RFID technology, reaching the sources in the library with RFID technology and Library services as copyright and lending out books with RFID technology.

Methodology - In the present study descriptive survey method was used to know the usage of Radio Frequency Identifier System (RFID). The author wanted to know the usage of RFID system among the students of SRCASW Library, Delhi. A structured questionnaire was designed to collect the raw data. This research employs the method of quantitative research to gather an in-depth understanding of the nature of usage of RFID system among users of SRCASW library.
Findings - The above study shows many authentic conclusions on data accuracy, speedy circulation, easy book identification, extension of library service, cost effectiveness, security of library materials. The study also examined the utility of 24X7 book droop unit, measured the improved operational efficiency, and measured the accuracy level of data transaction in circulation & Stock verification. Besides this the study also examined the user's satisfaction level, its shows that users are more satisfied with this system. The study also finds scope of application of NFC (Near Field communication) in the present library.
Discussion - RFID technology is very costly and cannot change frequently, thus good quality tags should be used so that there is no need to remove exposed tags frequently. Self-service of RFID may provide reservations, enquiries, and integration with management information and anti-virus protection.
Conclusions - The users of the library found this system very much interesting and time saving. The users are very much comfortable with RFID technology. Users can use the library services 24x7 Self-check-out and check-in is possible it supports the circulation system very effectively. The SMS and email service also very encouraging, it's reduced the library fine through reminder mail & SMS.
Recommendations - Orientation program for the RFID enabled is very much important. The NFC technology can be used along with the RFID, as the application radio frequency is same in both the technology.

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Approaches to Measuring the Efficiency of the Bulgarian Libraries

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Abstract: The challenge of evaluating library activities is crucial when introducing new technologies in the library field. Long underestimated in terms of intensive adaptation of the Bulgarian libraries to the challenges of new technologies and the need to respond to the needs of the patrons, this process is becoming crucial to their survival. Its importance is growing in the process of intensive digitization of library stock. The need to construct relevant to consumer demand libraries, as well as the introduction of the system of quality management of library work (TQM) highlights in the library practice the issues of library efficiency.
The text presents the specifics of the application of qualitative and quantitative methods to study the efficiency of the Bulgarian libraries, and in particular, the relation of the success of the library PR and the marketing activities to such studies. The emphasis is on the process of linking the introduction of innovative approaches

with the impact of current trends of global library practices. Highlighted is the role of measurement of library efficiency in terms of library management and strategic planning in libraries.
The challenges that arise throughout the study of the efficiency of different types of libraries are also brought to the fore, as well as the pitfalls in adapting the foreign experience that has been borrowed. Some of the difficulties associated with measuring library efficiency have been pointed out. The presented findings and conclusions are based on research of the practices in various types of libraries – public, university and specialized research ones.
Keywords: Library efficiency, Evaluating library, Measuring the efficiency, PR and marketing activities, Library management, Analyzing user needs, Efficiency of digitisation

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Assessing Library Services from Users Perspective in Environmental Research Institutes

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Abstract: The present research on assessing library services from userB's perspective of environmental research institute of India was carried out to perceive the effectiveness of library swervices. The research results demonstrate user's perception regarding physical facilities of libraries, equipment in the libraries, appearance of library personnel along with reliability and ability to perform the service dependably and accurately. The responsiveness and willingness of librarians to help users, with providing prompt services. The research further investigated the knowledge and courtesy of library professional in library services. Research and development centres are huge laboratories of scientist seeking information every second in varied research areas, thus an assessment of library personnel in providing individualized attention. The results from the research showed fair satisfaction of existing library services in environmental research institutes, detailed analysis shows area of progress required in library services.
Keywords: Library services, Users, Assessment, Perception of users, Environmental research, Research institute

Assessing the Value of Leisure Reading in the Public Library: Two Case Studies

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Abstract: This paper, based on a research project, investigates the value of leisure reading at two public libraries in Cape Town. Its broader purpose is to explore the value of the public library in the lives of individuals and communities by examining its role as provider of free reading material and promoter of reading. This paper, while reporting on the preliminary findings, will discuss the development of the methodology underpinning this research.
This research was inspired by the fact that South Africa does not have a strong reading culture and research shows low levels of book ownership. As a result public libraries are the primary source of leisure reading material for the majority of the population. At the same time, public libraries in South Africa, have been tasked with improving literacy and have received considerable additional government funding to establish new branches and extend library services. This brings to the fore the need to better understand, and quantify, the value of the public's interaction with the library in particular the use of the print collection that is often overlooked and difficult to assess.
We have framed our study in the theory of reading and its value, drawing on theorists such as Krashen and Nell who show that leisure reading has positive cognitive and psychological effects on the individual. These theories are supported by a number of practical research efforts including work by Usherwood.
Our research was undertaken using the principles of impact assessment outlined in the recently published ISO 6439 – *Information and documentation – Methods and procedures for assessing the impact of libraries* standard. We have also applied the GLOs (Generic Learning Outcomes) developed by for the Museums Libraries and Archives Council in the United Kingdom to assess the outcomes of the reading experience.
While similar research has been conducted in the United Kingdom and United States no study of this kind has been undertaken in South Africa.

Assessing the Use of Journals and Formats Preferred by Postgraduate Students of Makerere University

Racheal Nabbossa

Makerere University, Uganda

Abstract: Academic libraries are focused towards effective information provision that is necessary for teaching, learning and research. Makerere University Library (Maklib) is no exception as it has strategies towards effective provision of information resources. Journals are some of the resources that are provided by the library to support teaching, learning and research and they are provided in two formats namely: the electronic format and the print format. This research attempted to investigate whether postgraduate students use these journals and the formats they prefer to access. Research was conducted involving 114 postgraduate students using questionnaires as the data collection tool. Qualitative data was collected, analysed using Google forms and presented in graphs, tables and text.
Findings revealed that most postgraduate students are aware of the existence of journals provided by the library although some expressed a lack of awareness. Further still they use the journals provided and most of them have preference for the electronic format of journals. However it was also revealed that access was hindered by several factors such as long procedures to access the library.

Recommendations that need to be adopted by Maklib are also discussed such as increasing on awareness campaigns, continuous training of students and staff and providing the necessary infrastructure to enhance access to the journals.
Keywords: Journals, Journal formats, Print journals, Electronic journal

Assessment of East and West African LIS Programs in Meeting the Demands of the Digital Age

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Abstract: In today's world where digital seem everything and everything seem digital, the library as an institution is continuously struggling to meet up with the diverse platforms through which it can satisfy the demands of its patrons. This is especially so in Africa, as several Western institutions responsible for the training of librarians have done a considerable job in keeping up with the professional demands of the 21st century information environment. To help the Africa librarians fulfill this demand, programs in LIS need to be constantly reviewed to match up with the changes in the professional field. In this article, we assess the curriculum of four LIS programs in East and West African countries in order to see if the curriculum is in sync with the professional demands of librarians in the emerging digital-dominated information market. Our comparison is based on similar LIS programs in the United States. Our belief is that, it is expedient that LIS curriculum, especially in Africa, be constantly reviewed in order to meet the daily skill demands for information professionals on the continent.
Keywords: Curriculum assessment, LIS education, Digital age, Africa

Attitudes of Business Faculty towards Information Overload: The Case of Sultan Qaboos University

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Abstract:
Purpose
The purpose of this paper is to examine the impact of information overload on business faculty at Sultan Qaboos University (SQU), Oman.
Design/methodology/approach
A survey was used for the purpose and data were collected through an electronic questionnaire distributed to faculty at College of Economics and Political Science, SQU, to explore the influence of information overload on the respondents' work and social life.
Findings
The survey reveals that information overload is a common experience for the respondents. The findings also show how, when and where information overload is usually experienced, as well as the more general information habits and perceptions of the information environment that SQU business faculty display.
Practical implications

This paper adds practical value by providing some empirical evidence to complement the growing body of literature demonstrating how information explosion especially through the internet is having an adverse impact on university faculty performance. Suggestions are offered for reducing the duplication of information and adopting appropriate information\management strategies.

Originality/value

This paper fulfills an identified need to study how the growing phenomenon of information overload is affecting faculty performance even in developing countries.

Keywords: Information overload, Business faculty, Attitudes, Causes, Perceptions, Survey

Behavior as an Agent of Change: An Ethnographic Study of Student Research Behaviors at Long Island University Libraries

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Abstract: This paper and related presentation describes a longitudinal ethnographic research project at Long Island University Libraries aimed at exploring students' research and academic work practices – that is, the strategies, tools, and resources that they use during their course of college study – to gain insight into how students learn, make use of resources in support of their learning, and the role played by various types of technology. Although many institutions are actively engaged in measuring learning outcomes, data on how students work, and why they select the tools and resources that they do is lacking. This project featured a mixed-methods approach and gathered qualitative and quantitative data on the work habits of students by way of a survey, thirty individual ethnographic interviews with students on two different campuses, and more than 60 hours of student observations at both campus libraries. The generation of textual, verbal and visual data provided a more holistic exploration of the research questions than any one approach alone. The research team posed two fairly simple questions: Will the study's findings align with the Libraries' strategic plan and/or provide evidence to support changes in strategic direction? How will the findings be used to alter spaces, services and resources? This presentation will share initial descriptive and inferential findings and discuss the findings in relation to the changing nature of the academic library as place, space, and concept.

Theoretical Framework: The theoretical framework for the study has two parts. First, the use of ethnographic approaches to study human behavior, and second, the ethnographic study of libraries and their use. Ethnographic research is a cross-disciplinary, qualitative research approach grown out of the disciplines of anthropology and sociology, and used in a variety of other areas such as psychology (social, educational, behavioral, and organizational), business, the health sciences, and more recently, within library, information and computing science. It seems a particularly relevant approach for library settings, since libraries can be as complicated, diverse, and misunderstood at times as any other organization, culture or environment. The use of ethnographic methods to investigate bibliographic trends, library services, and information systems is itself not a recent development. What is new is the increased publicity and attention that some library research projects have attracted. Studying Students: The Undergraduate Research Project at the University of Rochester (Foster & Gibbons, 2007) is a good example of this. This project, which began in 2004, has so far produced a book of the same title, been presented at

numerous conferences, and formed the basis of a number of instructional workshops on undergraduate and faculty research behavior sponsored by the Council on Library and Information Resources (CLIR, 2010).

Keywords: Qualitative study, Ethnographic study, Academic library, Student research behaviors

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Beyond the Download: Issues in Developing a Secondary Usage Calculator

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Abstract: Since 2002, Project COUNTER has led the way in developing and maintaining systems of measurement for download counts. While these counts have often been used as a proxy measure in determining journal and article value for libraries and publishers, they miss an important post-download secondary usage factor – namely, that of sharing. Likewise, the new altmetrics movement, while accounting for the impact of social media, misses this crucial aspect of sharing as distribution often occurs via email. This creates difficulty in quantifying an exact measure. The Beyond Downloads project examined the impact of sharing on usage and metrics. One aim of the study was to develop a calculator for measuring total digital usage – including sharing. Through an examination of a range of sharing systems researchers were able to identify the most commonly used platforms or types of platforms for sharing scholarly articles, while an international survey provided data on access, download, saving, and sharing behavior. Survey results indicated that a range of sharing patterns can be estimated, but post-download usage often is too skewed to establish any exact calculation. Ranges of sharing patterns, at a confidence level of 95%, were derived from the data in lieu of a sharing calculator. These ranges vary greatly dependent on many factors. Furthermore, our project highlighted the primary issues in developing a secondary usage calculator –namely the lack of global standards in sharing data and the necessity to extend a survey data approach into a longitudinal study. As a consequence, a two-fold approach is needed going forwards: 1) data-based approach in which a COUNTER-like universal standard for sharing data is developed and adopted across multiple platforms; 2) survey-based approach in which a longitudinal study is administered to a multi-disciplinary online community.

Keywords: Scholarly communication, Usage studies, Secondary usage, User behaviour, Calculator

Big Data-Based Book Recommendation Optimal Model Design

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Abstract: This paper is one of the outcomes from the library big data analysis project administered by Ministry of Culture, Sports and Tourism of Republic of Korea. The purpose of this study is to design an optimal model for big data-based book recommendations that provides personalized and convenient book recommendations in the midst of abundant books. Book recommendations come from the following methods: (1) recommendation from statistical analysis including demographic statistics, and among collaborative filtering methods based on users' reading and loan records (2) item-based filtering for recommending highly associated books, and finally (3) weighted-user-based filtering for recommending highly associated user's reading list. These recommendation methods will be beneficial for public library users and mobile application users as well.
Keywords: Big data, Book recommendations, Collaborative filtering, Item-based filtering, User-based filtering

Book Bank System, a Model for Enhancing Access to Reading Materials in Academic Libraries with Low Budgets: An Experience from Makerere University in Uganda

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Abstract: Academic Libraries play an important role of developing collections that support core university functions of teaching, learning and research. Currently, most university libraries experience increasing user populations while budgets continue to dwindle. This has a negative impact on the collection development and consequently a reduced book to – student ratio. Innovative strategies to sustain a meaningful collection development becomes critical. In Makerere University, each Ugandan student used to be given a text book allowance through the University Book Shop. The system later proved to be unsustainable. A Book Bank system was started in 1990 as a strategy to ensure availability, management, accessibility, and use of basic text books to students, against limited funds. After ten years, a survey was conducted among the key stakeholders of the university to appraise the performance of the Book Bank system. Respondents included students, lecturers, heads of departments, deans and librarians who were involved in the Book Bank implementation. Methods included interviews, meetings, documents review and one workshop. Findings revealed that books were available and that 92% of the students utilized Book Bank facilities. However, funds, space and staff were found to be inadequate. The survey concluded that the Book Bank system was an appropriate strategy of managing the library's information resources. The services were appreciated and needed by the majority of the students who could not afford to buy basic prescribed text books. The survey recommended that the Book Bank system continues and be strengthened in order to serve students and staff more efficiently.
Keywords: Academic libraries, Accessibility, Book Bank System, Budgets, Collection development, Management, Model, Reading materials, Strategy

Building a Framework for Multi-Year Assessment and Continuous Improvement: A Case Study

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Abstract: Chapman University is a private liberal arts university in the United States. The university library is committed to maintaining and improving effective operations and resources for the planned expansion of the University, including growing numbers of graduate and professional programs. In 2010, the library initiated a multi-part, multi-level assessment program. The objective of the Assessment Plan is to provide a model to systematically collect, review, and use information about the library's services and resources for the purpose of improvement. The Assessment Plan correlates directly to the mission and vision of Chapman University and the library.
The Plan has seven assessment targets: (1) information literacy competency and student learning outcomes; (2) library public services; (3) library collections; (4) internal working processes; (5) data collection and data mining; (6) staff development; and (7) the physical facility. The combination of these areas gives comprehensive coverage of library operations. The Assessment Plan uses best practices, sets benchmarks, and follows recognized standards and guidelines to comprehensively evaluate the areas identified above by measuring their quality, effectiveness, and impact. Assessment is an ongoing process of data gathering, analyzing results critically, making decisions for continuous improvement, and reporting the health and value of the library to its constituencies.
In the five years since the inception of the Assessment Plan, 190 assessment projects have been completed, resulting in modifications, expansions, and other changes across the seven target areas. The library has been able to "close the loop" with regard to the assessment cycle in several ways. One example describes how specific targets and methods of assessment were used to achieve librarian outcomes such as guidelines, professional development, ranks, promotion, and participation in faculty governance. Another example is the implementation of a strategic multi-year collections management plan for reallocating budgetary resources and meeting the demand of new graduate programs in the health sciences.
Keywords: Assessment, Value of libraries, Process improvement, Role of librarians, Collection management

Building the Capacity of Researchers and Students in a Agricultural, Environmental and Health Sciences: The Librarians' Participation in Promoting Research4Life and TEEAL Resources in Uganda

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Abstract: This paper set out to: examine the extent of use of Research4Life (R4L) and The Essential Electronic Agricultural Library (TEEAL) information resources in Uganda, and to examine the role of librarians in supporting learning, teaching and

research in areas of agriculture, environment and health in academic and research institutions. An online survey was conducted to gain insight of the trainings that were conducted nine institutions between April 2014 and November 2015. The findings of the survey are reported and discussed. The findings indicate that since the trainings started, the use of R4L and TEEAL has changed the way research and study are done. It is concluded that while the programmes have been vital in supporting learning teaching and research (there is evidence of a largely positive experience of using these resources), librarians have been very instrumental in achieving this improvement. Further investigation into their use in institutions outside the studied area is recommended.
Keywords: Electronic information resources, Librarians, User study, Agriculture, Environment, Health

Challenges to Improving Information Management in Academic Libraries in Nigeria

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Abstract: The problem facing most establishments including libraries in developing countries like Nigeria is the collection and managing of information. Information management aims at improving the effectiveness of organizations by managing information as a resource-providing access to relevant information in a timely and cost-effective manner. Good information management enables establishment to have meaningful, reliable and usable information when needed and providing mechanism for ensuring accountability and managing risk. There has been concern for educational institutions in Nigeria to solve the problem arising from inadequate storage, flow and use of information. Inadequate access to/or possession of relevant information has negative impact on the effectiveness of decision-making of administrators. Librarians/information managers must identify the user community and their information requirement, engage qualified staff to man the management information systems, train the informational professionals, automate the library and adopt proper information management strategies to improve the efficiency of information in tertiary education in Nigeria.
Keywords: Information, Information management, Information professionals, Information management strategies

Classification System of the National Library of Medicine: Its Properties and its Applications

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Abstract: The Classification System of the National Library of Medicine is a special Classification System used for classification of the information sources in the field of medicine and the life sciences, a system developed by the National Library of Medicine in USA since 1951.

Many of medical libraries in the world applied the NLM classification system, because it's available on the internet free; in addition that the most important features of this classification is, updated annually, and it has a relationship with Medical Subject Headings (MeSH), and the NLM catalogue.
The study aims to shed light on the structural characteristics of the NLM classification, the nature of the notations used, as well the components of the systems such as: (the Outline of the NLM Classification Index, form numbers, table G (geographic notation), 19th Century Schedule, and the lists of the class numbers added and canceled).
The study used the case study methodology by focusing on the characteristics and procedures of the classification process in the NLM classification system.

Co-authoring Network in Publications in the Series Boletim de Pesquisa e Desenvolvimento Edited by Embrapa Temperate Agriculture (Pelotas-rs-Brazil)

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Abstract: Embrapa (Brazilian Agricultural Research Corporation) is a research and development company for agriculture. It was established in April 26, 1973 and is under the Ministry of Agriculture, Livestock and Supply of Brazil. The company headquarters is located in Brasilia (Federal District) and there are 46 decentralized units in all regions of the country.
The Embrapa libraries are met through the Embrapa Library System (SEB), which is the coordinating body. SEB aims to promote the management of scientific and technological information within the company.
Librarians, since the creation of Embrapa, work to organize, record, store and disseminate information and act in the modernization of information systems linked to knowledge organization.
The technical and scientific literature in agriculture is one of the results produced by Embrapa.
Examples of publications issued by the company the following types: no serial publication: books, brochures, booklets, posters and brochures. Non-recurring serial publication: 500 Perguntas - 500 Respostas, Frutas do Brasil, *Circular Técnica*, Comunicado *Técnico*, Boletim de Pesquisa e Desenvolvimento e Documentos. Periodic serial publication: Revista Pesquisa Agropecuária *Brasileira* (PAB) e Cadernos de Ciência & Tecnologia (CC&T).
The aim of this study is to identify the network co-authored publications in the series "Boletim de Pesquisa e Desenvolvimento" (in English: Research Bulletin and Development) edited by Embrapa Temperate Agriculture (Pelotas-RS-Brazil) and available in the institutional repository Infoteca-e.
Keywords: Scientific information, Agricultural information

Collaboration and Information Literacy in Portuguese School Libraries: A Challenge for the Future

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Abstract: This communication is based on some conclusions of a PhD program research, completed in 2011, on the impact that specific training of the teacher librarian might have in academic success in Portuguese elementary schools, in which 20 qualitative interviews to teacher librarians were conducted between November 2006 and January 2007, and the work developed in teaching a Master course, at Universidade Aberta in the academic years 2013/14, 2014/15 and 2015/16 whose students are teacher librarians or belong to the school library team.
The concept of information literacy is afterwards presented as well as some information literacy models. It is then justified the need for its implementation in schools in general and the role that the school library and the teacher librarian, in particular, must assume, concluding that the success of this implementation will depend on a lot of collaborative work between these educational actors.
In this context, reference is made to one of the main conclusions of the PhD research, about the need for a real collaborative work between teachers and teacher librarian, and not just coordination or cooperation as indicated by teacher librarians in 2006/2007, aiming at students' school success and educational attainment as well as the development of their information literacy skills.
The perceptions of master students in relation to collaborative work between them and the rest of the educational community are then presented, concluding that although there is still consensus on the benefits of collaboration, in 2013/14, 2014/15 and 2015/16 it was only possible to identify coordination and cooperation practices.
Finally some strategies are suggested for the implementation of a true collaborative work between the various educational actors aiming to develop bigger and better information literacy skills in our students, being all this a real challenge for the future.
Keywords: Collaboration, Information Literacy, School libraries, Teacher librarians, Universidade Aberta, Portugal

Community-Engaged Public Librarians-In-Training as Information Bridges to Further User-Centric Service Evaluation in an Online Learning Environment

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Abstract: This paper introduces the concept of an *information bridge* to represent the role of public librarians-in-training to develop user-centric service evaluation in an online learning environment. An information bridge is defined as an integration of human-and-technology conduits that facilitate intellectual and physical access to the reality of everyday occurrences (e.g., knowledge of experience, information access, and access to patrons) at the partnering public library agencies. Public librarians-in-training in this course study participated using synchronous and asynchronous distance education tools forming an information bridge. They generated context-relevant user-centric deliverables in service evaluation during a course on public library management and services taught since spring 2006 in the School of Information Sciences at the University of Tennessee. The course experience allowed the public librarians-in-training to further their engagement with their local

communities and collaborating libraries in order to collect valuable feedback from their user stakeholder constituencies regarding assessment and evaluation of select services. The library community benefited in receiving systematically developed service evaluation feedback collected from select users; the public librarians-in-training gained practical experience in applying information constructs in the context of a real-life community setting. The *information bridge* construct to understand the role of the public librarians-in-training and their use of online learning technologies provided a valid solution to the challenges of limited resources, limited staff, and limited availability of relevant and valid user datasets public libraries face in their continued struggles to grow and remain viable in the 21st century.

Keywords: Public librarians-in-training, Information bridge, Community-engaged, Online learning environment, User-centric service evaluation

Community Information Services through Public Libraries and Information Centres: An Experience in West Bengal, India

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Abstract: Public Libraries that are existed with the basic role of providing access and preserving the recorded knowledge of past and present for future use. These are also responsible for providing required information to the community which help people in daily problem solving or in raising the quality of their lives. Community Information Services (CIS) is one through which a public library provides community information to surrounding community. The paper highlights the present role of public libraries and Community Information Centres on CIS. This paper also discusses about Community cum Library Information Centres (CLICs) in West Bengal implemented in 1999. This paper also discusses the role of cooperation in facilitating community information services (CIS) through public libraries. It presents in short the theoretical aspect of CIS.

Keywords: Community Information Services, Public Libraries in West Bengal, Public libraries, Community cum Library Information Centres (CLICs), Library services

Comparison of Training Course of Teacher Librarians in France and Japan

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Abstract: In Japan the School Library Law was established in 1953 and the training course of teacher librarian began in 1954. The School Library Law was partially revised in 1997 and the Ministry of Education, Culture, Sports, Science and Technology, MEXT conducted the new programme of teacher librarian in the following year. The training courses of teacher librarian have been carried out in summer courses, lectures of universities or junior colleges, and the University of the Air. This programme consists of five subjects with 10 credits (150 hours).
In France the position of "documentaliste (teacher librarian in secondary school)" is created in 1989. Since 1991 the training courses of documentalistes had been carried out in les Institutes Universitaires de Formation Maîtres, IUFM but since 2013 has

been carried out in les Écoles Spérieurires du Professorat et de l'Éducation, ESPE. These schools are at the level of graduate school. The term of training course lasts two years. They are studying in 700 – 800 hours in the 2 years' training course. The trainees are required to take the national examination, concours. This paper aims to analyze the difference of their missions, roles and situation between France and Japan.

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http://www.abf.asso.fr/fichiers/publications/bibliotheques/sommaires/bib-sommaire61.pdf

A Comparative Study of Leadership Competencies of Academic Librarians in Malaysia

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Abstract: The study investigates leadership needs and requirements for academic librarians, specifically to examine the perception of library leaders and librarians about leadership competencies for academic library leaders and identify the degree of differences in their perception. Successful leadership contributes to building social capital and ultimately to both sustainable library services and the common good. The study takes on a quantitative approach involving a survey of Library Leaders and Librarians at a Malaysian university library. Two separate questionnaires were designed based on an adaptation of the MySkillsProfile@2012 and Gorman's Competence Inventory was used to examine what leadership competencies were considered to be most important. The study found that academic librarians only possessed moderately developed leadership competencies and the frequency of leadership training courses that are being conducted by an academic library in a year is not adequate for them to acquire leadership competencies. The top five leadership attributes as perceived by Library Leaders showed little difference in the ranking of the competencies between the two groups. The adapted instrument developed from this study can be applied, tested and used to determine leadership training needs based on the perceived gap.

Concepts of Knowledge Management in Library & Information Services at Central Forest Library: A Case Study

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Abstract: This paper presents a Study on Library and Information services at Karnataka forest department Central Forest Library. The growing need for knowledge management has influenced every component and operation of a library. Knowledge management requires more effective methods of information handling, speedy transfer of information and linking of information with individuals and their activities. It demands library patron centered development of information systems and services. Development of information communication technology (ICT) and its applications in Library and Information Centers, the concept of document management has been

changed to information management and the entire scenario of information management has started its change to knowledge management.

Keywords: Knowledge Management, Information communication technology, Library services, Digital Library

Content Analysis Model to Analyze Facets of Social Mission of Public Library on the Facebook and in the Websites

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Abstract:

Introduction - In this paper we present the development and the implementation of a content analysis model for observing aspects relating to the social mission of the public library on Facebook pages and websites.

Method - The model is unique and it was developed from the literature review (Audunson, 2006; Aabø & Audunson, 2012; Calixto 2005; Calixto, Nunes, Freitas, & Dionísio, 2012; Gómez Hernández, Castillo Fernández, & Quílez Simón, 2010; Hernández Pedreno, 2010; IFLA/UNESCO, 1994; Nunes, 2003; Pateman, 2011; Varheim, 2008a; Varheim, 2014; Usherwood, 1999). There were designed the four categories for analysis *Generating social capital and social cohesion, Consolidating democracy and citizenship, Social and digital inclusion and Fighting illiteracies*. The model enabled the collection and the analysis of data applied to a case study consisting of 99 Portuguese public libraries with Facebook page. With this model of content analysis we observed (Denscombe, 2007; Bogdan & Biklen, 1994) the facets of social mission and we read the actions with social facets on the Facebook page and in the Web sites of public libraries (number of actions and type of social facets).

Results - We present the results summarized in the four categories mentioned above, in Facebook we stress Category 1 *Generating social capital and social cohesion* with 267 actions, followed by Category 3 *social and digital inclusion* with 48 actions, Category 2 *Consolidating democracy and citizenship* with 19 actions and finally category 4 *Fighting illiteracies* with 9 actions. The websites highlight Category 1 *Generating social capital and social cohesion*, with 62 actions, followed by category 4 *Fighting illiteracies* with 55 actions, Category 3 *social and digital inclusion* with 32 actions and finally Category 2 *consolidating democracy and citizenship* with 3 actions.

Discussion - At the end we discuss in parallel the results of observation of the Facebook pages of libraries and the websites.

Conclusions – By reading the description of the actions of the social mission, the general conclusion and the most immediate is that 99 public libraries on Facebook and websites rarely publish social character actions, and the results are little satisfying. The Portuguese public libraries highlight substantially the actions in the category *Generating social capital and social cohesion*. These results demonstrate that public libraries mainly work this subject and value services and actions related to the site - space in which they operate, developing the sense of community and promoting the local culture.

Keywords: Qualitative and Quantitative Methods, Content analysis model, Social Mission of the Public Library, Facebook

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Cross-Checking Lingual Arrays as a Search Tool in Massive Scientific Data Collections

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Abstract: The paper presents a new method for identifying repetitive statements in libraries that are collections of scientific and technological information. The method based on cross-checking and then juxtaposing randomly selected titles and pieces of the text of abstracts of the publications allows the searcher to verify whether a particular statement is a repetition of an earlier made one or a new piece of knowledge (novelty). Examples are given of how the method works in respect of nuclear cross section data and theories of the atoms and nuclei.
Keywords: Cross-checking, Novelty verification, Library, Nuclear, Data collection

Data Publication in Oceanography: OGS-NODC Experience

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Abstract: The amount of available oceanographic data is rapidly growing thanks to the autonomous measuring systems and to the growing number of accessible repositories. The relationship between source data and other resources like scientific publications becomes essential. The challenge for the scientific institutions is to develop a strategy to ensure its long-term data accessibility with a clear acknowledgement of data originators.
Keywords: Long term data access, Acknowledgements, Metadata, Permanent identifiers

Data Sharing Ethical Challenges: Information Flow and Openness

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Abstract: Currently societies are undergoing changes due communication technology. Most people are in searching for quality, reliable and accessibility. Interaction in social networks is becoming a platform for decision maker with pertinent history, appeal and authority. According to Ekbia and Evans (2009) the principle of Boltanski and Thévenot about a polity model that "accounts for the confrontation with circumstances, with a specific reality…that accounts for the involvement of human being and objects in a given action", can be applied to the mentioned Social Age of Maria Azua. A massive adoption of technology has benefited the social age and also social networking characterized by a decreasing cost of communication and emergent new regimes of information. These regimes have an impact on six information worlds identified by Boltanski and Thévenot as: inspired, domestic, fame, civic, market and industrial worlds. Each of these worlds has a particular regime of worth; according to each people, how they are evaluated, and in turn to evaluate other people and object. In the social age, sharing of data is a common practice.

In this sense, data sharing is very valuable, though it is an application of information technology tools that cross many disciplines and professions for problem solving. According to Kowalczyk and Shankar, (2011) the nature of data focus on data generated digitally including texts, numbers, images, videos, softwares, algorithms, equations, simulations, etc. Such data may be generated by various means including observation, computation or experiment. Data are inherently collective and come in sets, a researcher or a professional would need a number of datasets or databases to take a decision. We refer to these as datasets as data collections. The process by which data are created, analyzed and managed is complex; the experimental and observational data collection process is known as data life-cycle. The information arquitecture for sharing scientific data is the Web 2.0 services. Data generated by the Web 2.0 can be measured through altmetrics procedures.

Our proposal is about how people manage to create and maintain social order against information can be discriminated in the social age with low cost communication, a two-way communication capable web-pages (semantic web), blogs and other social networking tools which identified each world in the regimes of information with the corresponding information perspective; source of information, used context and measurement.

Keywords: Information ethics, Data sharing, Information policies

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Developing the Web Portals of the German National Library of Science and Technology: Tools and Workflows Used

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Abstract: Teams working on the development of software systems use certain tools and workflows of product and knowledge management. These tools and workflows help them plan, monitor and control the product at all stages of the product lifecycle as well as capture, develop and share organizational knowledge. This paper shows what tools and workflows development teams of the German National Library of Science and Technology (TIB) use in different stages of the project when developing the Web portals of the library. The use case illustrated here is a project, in which the interaction concept and screen design of the video portal of TIB (TIB|AV-Portal) has to be adapted to the new look and feel of the TIB-Portal. The TIB development team involves a conceptual developer, IT specialist, Usability expert and project manager. The team begins by gathering and structuring preliminary requirements in the enterprise Wiki 'Confluence'. The conceptual developer and Usability expert create a user interface prototype based on these requirements, observing Usability issues. The team evaluates the prototype collaboratively using sprints from the product management framework Scrum and defines the requirements more precisely. It commissions external screen designers to create a new screen design – including an HTML click dummy – based on the prototype. Having received the screen designers' click dummy, the team commissions external software developers to implement the new interaction concept and screen design. The team tests the implementations according to the requirements specification and approves them after debugging. Finally, the implementations are deployed in the production system.
Keywords: Product management; Knowledge management, Tool, Workflow, Library, Web portal, User interface prototyping, Sprint, Scrum, Software engineering

Development of Electronic Resources in Russian Scientific Medical Libraries

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Abstract: Modern theory and practice of heath management science requires comprehensive and detailed problem analysis and improved management methods which is not possible without evidence-based medical data. Such data should adequately reflect current state and dynamics of the healthcare system, be intensive and applicable for managerial decision making regardless of health topics.
Information resources serve basis for research. All modern research is based on the already existing data on previous studies. However, it should be noted here that medicine is one of the most rapidly developing discipline and information in healthcare becomes out-of-date within almost three years. Availability of modern scientific databases and their accessibility by researchers assures timely access to accurate information to support research in medicine and healthcare.
The Russian Federation is experiencing a rapid development of electronic scientific information resources. In recent years Russia has seen emergence of new Russian databases and electronic journals, and started to purchase well-known foreign database. Access to such databases as well and their promotion among the scientific community remain challenging. Medical libraries serve an important resource to meet this challenge. Medical libraries provide different types of information ensuring compliance with copyright.

Russia has focused on developing a high-tech care. Such polity requires evidence-based medical information on clinical specialties; subsequently, it will be necessary to conduct more presentations of full-text electronic libraries and databases among the scientific community as well as to develop their interfaces in the Russian language.

Digital Humanities in the Academic Library: A Quantitative Analysis of Current Services and Future Needs

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Abstract: Digital Humanities projects have been developed in libraries for decades. However, in recent years there has been a new set of constituencies for librarians who have some expertise in digital humanities, such as faculty and students. As a result, libraries are recognizing that they may need to invest more resources such as staff expertise and time, technology, and physical spaces to make a more formal commitment by the library to this type of scholarship. The speaker will present a quantitative analysis of librarian and faculty responses about current digital humanities projects and services. Results include a discussion of resources needed to support future digital humanities scholarship.
Keywords: Digital Humanities, Academic libraries, Humanities

The digital museum as a place

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Abstract: In our digital age the interaction between physical and digital spaces is a key issue. It has been said, for example, that both for libraries and museums, there should be a physical-conceptual continuum between the two spheres, and that in museums in particular there could be a 'virtuous circle' between the physical space of the real museum and the information space of its website (Barry, 2006; Pomerantz and Marchionini, 2007). Taking as starting point the idea that museums, like libraries, constitute knowledge settings beyond the material objects they make available, this paper seeks to explore how the physical space of the real museum is *re*-presented online in the informational. In exploration of this question, it focuses on art museums and analyses their websites comparatively though a number of themes – from the way they present their collections online, through catalogues which reflect and develop their informational dimension, to how they establish the individuality of the museum through its architecture and display spaces, and create the museum's sense of place. The paper draws a fundamental distinction between three modes of linking the real to the virtual, and relates their web design differences to museological approaches. More critically, it argues that by revealing how the museum works as 'a technology in its own right' (Kirshenblatt-Gimblett, 2000) that actively constitutes knowledge and experience for visitors, the 'museum as digital place' can contribute to encouraging bottom-up explorations and challenges, and empower the visitor-as-reader, as well as creating meaningful learning and long-term memory.
Keywords: museum, website, physical, digital, place, online visitors

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Disseminating and Promoting Agriculture Information through Library and Information Services in Ghana

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Abstract: Farmers in Ghana are expected to be given relevant information they need for high quality and quantity of food, cash crops and animal production required to meet nutritional demands by the growing Ghanaian population. Librarians and information workers should participate actively in disseminating agricultural information to farmers in Ghana using audio-visual materials, Web 2.0 tools and Information Communication Technologies. This paper looks into the role of information in boosting food and cash crop production in Ghana. It highlights the problems associated with information dissemination to farmers in the country. Better agricultural practice and high associated yields can, however, be realized in the country through the provision of relevant agricultural information to farmers. Librarians and information workers in the country should make useful agricultural information available, and on time via researchers, agricultural extension officers or direct to farmers; using emerging technologies as a way of contributing to improve on the current food insecurity. Agricultural librarians, researchers and extension officers can get useful information from the Internet and various databases on agriculture and make same available to farmers in the manner and languages they can understand for use in ensuring faster agricultural development.
Keywords: Library, Information Services, Food insecurity, Agriculture information, Web 2.0, ICT

The Documentary Cinema in Libraries as Source of Knowledge: Analysis of the Content of the Algerian Documentary Films

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Abstract: This paper aims to present the Algerian documentary films as a source of knowledge, which enables the libraries to integrate in its collection. Over 15th years ago the Algerian documentary cinema returned to the festivals, television, and cinema. Making documentary films in Algeria a tool to speak, communicate about history, identity, and different events. It's a part of the national memory.
These characteristics make it as an essential element to enriching the library's collections. While, in front of the multiple subjects and productions in and out of Algeria. The libraries ask several questions: which documentary required and should integrate in its collection?
What kind of tools can be use to obtain the documentary films?

How to diffuse the documentary next to the book?
How to assess the documentary film?
To answer these questions we propose a method to analyse the contents of the documentary film about Algeria and the tools needed to obtain it.
Keywords: Documentary film, Library, Analyse method, Collection, Tools

Effect of the Research Methods Course to Get Information Literacy Competency of Students

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Abstract: The purpose of the research methods course, is to provide each student who taking the course an information literate. Therefore the aim of this study was to examine the students' research methods course after receiving the information literacy skills improves. In this study, a survey applied of students beginning of the semester who had taken the research methods course and a set of data obtained from this survey. Then, the same survey applied the same students at the end of the semester and some data were obtained. Then, both surveys were compared and students take this course before and after receiving the information literacy skills were analyzed.

Effective Knowledge Management Provision in Libraries in Nigeria

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Abstract: Implementing knowledge management programme in a service organization like the library has the potential of improving customer services, quickly bringing new products to market, and reducing cost of business operations. Information technologies are often used in knowledge management programmes in informing clienteles and employees of the latest innovations in the business sector as well as sharing knowledge among the employees. The information professionals have a role to play as they are traditionally regarded as good managers of explicit knowledge. Organizations and people are becoming aware of the importance of knowledge and a good number of them are embarking on knowledge management as a strategic initiative. Knowledge is the one sure source of competitive advantage especially in an economy where the only thing that is certain is uncertainty. Appreciating the importance of knowledge is one thing and sharing and managing it effectively is another. The present knowledge management paradigm arises from increasing proliferation of Information Communication technology (ICT) revolution and the need to train the human capital in order to acquire innovative skills for effective organizational development. This paper discusses the means by which librarians can make knowledge management can work in libraries in Nigeria. It x-rays the meaning and importance of knowledge and knowledge management, strategies for effective knowledge management, knowledge management practices in libraries and the role of information professionals (librarians) in effective knowledge management in libraries in Nigeria.

Keywords: Knowledge, Knowledge management, Information professionals, Librarians, Libraries

Effects of Consortium on Information Seeking Practices of LIS Professionals

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Abstract: CONSAL (Consortium of Sri Lankan Academic Libraries) funded by the UGC of Sri Lanka provided five databases for the universities under its purview from 2014 which includes about 70 LIS journals. The objective of the study was to identify the perceptions of LIS professionals towards the changes in their information seeking patterns after the introduction of the databases. The perceptions were measured using four aspects; *to what extent that their information needs are fulfilled by the available e-resources*, *what do they think of the coverage of information in the e-resources*, and *what effect is there on their information seeking tasks.* A structured questionnaire was developed with the support of already published research, as well as observations and experiences of the researcher and was piloted in two universities. Out of 110 LIS professionals in 15 public universities in Sri Lanka, 99 (excluding 11 on long-term leave) were surveyed. The questionnaire was circulated via e-mail and the data collection took place from 20 October to 20 December 2015. SPSS (Ver. 22) was used to analyse the data.

Response rate was 48.5%, 71% of the respondents were female while 42% were in the age group of 39-48 years, 75% had a Masters in LIS while 8% had PhDs, Primary language of 81% was Sinhala, while it was Tamil of 17% and English of 2%, and 71% worked in the main libraries while 29% worked in the branch libraries. Findings established that, Open Access resources are used by the majority (65%) followed by two UGC provided databases by 56% each. Information needs are fulfilled totally of 2%, more than 75% are fulfilled for 25%, 51-75% fulfilled for 29%, 26-50% fulfilled for 21% 11-25% fulfilled for 8% but less than 10% is fulfilled for 13%. Coverage is higly satisfactory for 8%, satisfactory for 38%, somewhat satisfactory for 42%, not satisfactory for 8% and highly unsatisfactory for 2%. The effect on their information seeking tasks was measured using seven statements; 40% stated that the use of printed library material decreased, 44% claimed that number of visit to the library collection decreased, and 44% claimed that, the time spent on searching information decreased (at the same time an equal percentage claimed that it increased). Of the respondents, 79% asserted that variety of information resources used increased and 85% claimed that collecting information is now easy, 79% claimed that using information is now easy and 83% claimed that searching for information is now easy.

In conclusion, information needs are fulfilled of 42% while it does not for 56% and the coverage is satisfactory for 46%, while it is somewhat satisfactory for 42% and for 10% it is not satisfactory. Of their information seeking tasks, search, collecting and using has become easier for 79% - 85%, but using printed library material, visits to the library collection and time spent on searching for information has decreased only for 40%-44%, for the others they are either increased or has not changed. It is recommended that the coverage of LIS material is increased so that the information needs are fulfilled and the information seeking tasks are made easier of the majority of LIS professionals.

Keywords: Information seeking, Consortium, LIS professionals, Sri Lanka

Effects of the digitization – the digital knowledge economy and the Finnish academic libraries

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Abstract: The recent changes in the knowledge economy and scientific knowledge dissemination have put academic libraries in a new situation. The demand for open access of scientific publications and the increasing amount of documents published need a new paradigm in the collection policies and collection building strategies of the academic libraries. At the same time the resources allocated to the academic institutions have been decreasing which has caused the need to reallocate the resources in the collection building and management as effectively as possible. The aim of the special session is to analyze how the use of data compiled from different sources, such as statistics and assessing user experience, as a tool for analyzing the effectiveness of the library's economic resources and how this has effected on the use of the libraries.
Keywords: academic libraries, evaluation, digitalization, statistics, cost-effectiveness

Electronic Libraries and Databases in Behalf of Developing Country

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Abstract: It isn't a long time since various databases and electronic libraries are becoming more accessible for Georgian (republic of Georgia) readers, students and scientists in libraries. Target segments aren't informed enough about existence of these bases yet. For Georgia, as a developing country there is a huge importance of popularizing science and access to information and knowledge. To make youth interested in science our state has to conduct complex actions.
Not many libraries in Georgia have in their collections printed copies of the most important publications, because most of them are published abroad and libraries can't afford such a huge acquisition. It's kind of unimaginable luxury for students and scientists from developing country having access to the newest reference literature. But how much useful are they for Georgians? For 70 years, while we were part of Soviet Union, working language for scientists and students was mostly Russian, but for last 15 years English became language of scientific communication. How this reflects in usage of electronic libraries containing publications mostly in English?
By introducing the complex survey I want to show you how access to electronic libraries and databases impacted research and education in a little developing country, how these two impacted on the quality of Georgian scientists' work and reference-seeking skills of students.

An Emergent Theory of Digital Library Metadata: Enrich then Filter

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Abstract: There is an increasing diversity and volume of print and electronic information resources and the emergence of new technologies coupled with changing user expectations for complete, timely, accurate and quality information sources. These are necessitating library standards agencies, libraries and library system developers to re-think their existing metadata principles, approaches, systems and tools which support the description, management, findability and discoverability of information resources by library users. Since most library standards are underpinned by theories and principles that were developed in the context of physical libraries and print resources, it does not always reflect the heterogeneity and diversity of users as well as the ever increasing size and variety of digital collections. Hence it is imperative future metadata approaches are underpinned by sound theoretical principles.

Within the context of current challenges, this paper aims to present an emerging metadata theory which stipulates that that metadata should be enriched by melding standards-based (a priori) and socially-constructed (post-hoc) metadata, and that this cannot be optimally utilised unless the resulting metadata is contextually and semantically linked to both internal and external information sources. Moreover, in order to exploit the full benefits of such linking, metadata must be made openly accessible, where it can be shared, re-used, mixed and matched, thus reducing metadata duplication. Ultimately, metadata that has been enriched (by linking and being made openly accessible) should be filtered for each user, via a flexible, personalised, and re-configurable interface.

The theory provides a holistic framework demonstrating the interdependence between expert curated and socially-constructed metadata, wherein the former helps to structure the latter, whilst the latter provides diversity to the former. This theory also suggests a conceptual shift from the current metadata principle of sufficiency and necessity, which has resulted in metadata simplicity, to the new principle of metadata enriching, where information objects are described using a multiplicity of usersB' perspectives (interpretations). Central to this is the consideration of users as pro-active metadata creators, rather than mere consumers, whilst librarians are creators of a priori metadata and experts at providing structure, granularity, and interoperability to that post-hoc user created metadata. The theory elegantly delineates metadata functions into two: enriching (metadata content) and filtering (interface). By providing underlying principles, this should enable standards-agencies, librarians, and systems developers to better address the changing needs of users as well as to adapt to recent technological advances.

The emergent theory of digital library metadata, although buttressed by two seemingly simple concepts, is nonetheless a first rigorous attempt in library and information science (LIS) research to integrate the concepts of enriching, linking, openness and filtering into principles and subsequently into a holistic digital library metadata theory. By making the case for mixed metadata (standards-based and socially-constructed metadata), the theory brings into focus the importance of re-conceptualising current metadata principles, mainly suggesting a shift from objectivistic ontology and deterministic metadata approaches which chiefly focus on metadata simplicity to a social constructivist, interpretive ontology, and non-deterministic continuous and evolving process of metadata enriching.

Keywords: Metadata, Metadata enriching, Metadata filtering, Metadata theory, User-generated metadata, Linked Data, Metadata openness

Evaluation the Efficiency of Public Libraries in the Province of Gilan in Iran by Data Envelopment Analysis (DEA)

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Abstract: This study aimed to evaluate the performance of public libraries in the province of Gilan in Iran by models based on data envelopment analysis in order to pave the way for better management of resources in public libraries.
The research was done by analytical survey method. Data gathering was done from 44 public libraries in the province of Gilan, according to the Public Libraries Foundation statistics. The input data consists of the number of books, librarians, libraries floor area and number of computers, while the output data was the number of members, number of clients and number of loans which were assessed. Data analysis was done using correlation analysis by spss statistical software and LINGO-GAMS software for mathematical programming and model solutions.

The evolution of the personal networks of novice librarian researchers

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Abstract: This presentation reports the findings of an analysis of personal network data gathered from the novice librarian researcher participants of the first year of the Institute for Research Design in Librarianship (IRDL), an institute designed to provide instruction in how to conduct a research project and establish a peer-network of like-minded librarians to support each other throughout the research process. Analysis of the first year of data (four waves) will be discussed in this presentation. The data gathered is about the people and the strength of the relationship in the personal research networks of each of the IRDL participants. During the presentation we will report on the observations of the networks over a year's time and show you visually how they evolved. The results have implications for how librarians develop themselves, and may influence the future of libraries generally.
A highlight of this presentation is to focus on our methodological decision to gather the four waves of data in survey format. We will describe the mechanism used to gather that data, the freely available, open source, web-based software used to gather personal network data, EgoWeb 2.0. We will describe the process of customizing the survey software to ask questions about the people in the librarians' research networks. We will demonstrate the computations that the software provides, as well as the attractive visualizations of the personal networks.

Exploring Children's Reading Behavior of Google SERPs in the Context of Searching: Methodological Approaches and Challenges

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Abstract: Existing research on the readability of web content such as search engine results pages (SERPs) has relied on computational analysis in profiling user web sessions and classifying web pages by readability. In the presentation based on this abstract, we report on a study that has involved children in grades 6-8 in reading Google SERPs and corresponding web pages in the context of searching on three tasks. We use eye-tracking to capture the children's eye movements and fixations in reading SERPs.

The overarching goals of this study are to: a) investigate children's online reading behavior patterns in the context of searching Google, 2) assess the readability of SERPs and corresponding web pages based on children's ratings of reading difficulty and verbalizations of their experiences, and 3) identify the criteria children use in selecting ranked results from each SERP. The findings from this study should contribute to developing child-based models that could be used to personalize and predict the readability of Google SERPs and web pages for children in grades 6-8.

Our methodology includes quantitative and qualitative approaches. These include: (a) baseline reading assessment; (b) eye tracking using Tobii eye-tracker (X2-60) and associated software; (c) reading skills assessment; (d) SERPs reading difficulty assessment; (e) Retrospective Think-Aloud (RTA); and (f) Google SERPs programming. We will report on each of these methodological approaches and discuss the challenges we have faced. We will share our experiences in working with children in middle grades and collecting data using eye tracking software and hardware.

Acknowledgment

The Google SERPs readability project is supported in part by Google, Inc. We thank Google, Inc. for the financial support awarded to the first two named authors. We also thank the child-parent participants and the school librarian who has assisted in recruiting the parents, in developing the instruments, and in finalizing the search tasks.

Exploring Visual Representations of the University Library through a Photo Contest

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Abstract: Users' photographs taken in a library building can be symbols illustrating their inner perceptions of the academic library as a place and its services. These photos can also enable the library to elicit users' insights beyond those offered by other mainstream techniques of data collection. By applying visual content analysis, this paper aims to reflect on how the photos, which were originally submitted to a contest as part of the Thai university library's marketing campaign to promote its brand, can be valuable representations of the library that the photographers have actually interact with. This kind of visual method has potential for being used to

supplement library managers' efforts to discover real user needs that shape both service design and marketing in the library context.
Keywords: Library photographs, User perception, Visual content analysis, Visual methods

An Exploratory Study of Seed Libraries in the United States

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Abstract: Seed libraries are a relatively new phenomenon in the public library world. Most of the work on seed libraries is confined to the professional literature. In fact, there has been no sustained empirical research on this topic published in the extant peer-reviewed literature. The main purpose of this exploratory study is to respond to this gap by providing systematic, evidence-based research about seed libraries contained in public libraries.
This study investigates seed libraries that have been established in various public library branches throughout the United States. The study seeks to understand why such libraries have been created, the processes and resources required for their establishment, how they function, what populations they serve, whether they partner with any community organizations and/or academic institutions (e.g., university agricultural extension offices), whether there have been any regulatory issues that circumscribe or otherwise impact their activities, how such regulatory issues have been addressed, how their activities relate to more traditional library processes and functions, and their prospects for long-term survival.
As an exploratory study, data were collected using semi-structured face-to-face and telephone interviews. Purposive and snowball sampling techniques were employed to identify potential interview informants. Since almost all of the existing seed libraries are found at branches of public libraries, the majority of interview informants were public librarians. However, given some of the regulatory hurdles encountered by several seed libraries in a few states, interviews were also conducted with lawyers and community organizers involved in such challenges. The paper presented at the conference will report on the major findings from these interviews.
I believe that this paper fits the conference's theme of "Exploring Trends and Challenges on Building the Future Libraries" since, as many of the interview informants pointed out, seed libraries offer a novel mechanism for making the public library relevant to current and new patrons in ways that build on some of the traditional goals of public libraries, including such things as ensuring access, developing new knowledge, and promoting community engagement and development.
Keywords: Seed library, Public libraries, Access, Community engagement, Sustainability

Float or Sink? Implementing Floating Collections – A Case Study

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Abstract: LiUB consists of five libraries located at four campuses in three cities: Linkoping, Norrkoping and Stockholm. Four of them, located in Linkoping and Norrkoping, were involved in the process. During the years, there has been

extensively book transports between different libraries. Sought after books were sent to the requested library, and then sent back to the owning library when returned.
In December 2010 Linkoping University Library (LiUB) started to test Floating Collections as a new way of working with the collections. The test was coordinated with the implementation and change to Dewey Decimal Classification (DDC), and every time a new bought book appeared or when a book was transformed into the DDC-collection the floating collection grew. Floating Collections means that a book doesn't belong to a certain library. It is shelved where it is returned and therefore it will stay where it is in most demand.
The placement of books will be user-driven and the sharing of books leads to reduced handling and therefore less wear and tear on items, and also a more economic acquisition method. The reduced handling is connected to reduced number of books in transport when the former routine of sending books back to an owning library is removed. In this case study we have looked at the complete implementation process; from the first discussion, the test-start, the evaluation of the method which includes a staff survey, and finally the Boards decision that Floating Collection will be a permanent way to work with the collections at LiUB. The methodological approach mimics YinB's (2009) case study model. We also compared LiUB's implementation with other libraries experiences in implementing Floating Collection, and to Library 2.0 (Casey & Savastinuk, 2007), as the user needs will decide where the books are shelved. Further, the study is connected to factors that affects the realignment in changing processes and resembles Kotter (1996) and Nutefall's and Chadwell's (2012) factors for successful realignment.
The study revealed that staff concerns and other experiences relating to Floating Collection at LiUB are similar to other libraries. A main issue for staff on the negative side is weeding routines, but on the positive side you will find advantages like more user-driven collection, a reduced number of books in transport and a reduced number of purchased items. Some of the negative effects that is expressed in the survey is probably depending on the transformation into DDC and not due to Floating Collection. An example is that the possibility to browse is lost, which is more likely due to DDC, since DDC categorize the topics in a very different way than the former classification system (SAB).

Keywords: Floating collections, Implementation, Case study

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For King and Country: An Analysis of Propaganda in World War I Exhibitions

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Abstract: During the Centenary years of World War 1, many libraries and museums around the United Kingdom and Europe held exhibits featuring photographs, writings, and personal stories from the war. These exhibitions were designed to show both the patriotic and devastating aspects of the Great War, while also teaching generations of

viewers about how this history has impacted present day. The purpose of this study was to discuss the impact of war propaganda pieces on the War and how a selection of exhibits throughout England and Scotland handled the display and importance of these pieces within their exhibits. This study also discusses the importance of museum and library exhibitions in regards to design, accessibility, preservation, and content.

The selected exhibit sites were the British Library, the National Library of Scotland, the Cartoon Museum in London, and online exhibitions from the Liddell Hart Centre for Military Archives, the Maughan Library at King's College London, and Europeana 1914-1918. Each of these sites exhibited a different aspect of the war such as a particular subject or time period, and each exhibit discussed propaganda in a unique and powerful way.

Framework for Development of Information Technology Infrastructure for Health (ITIH) Care in India – A Critical Study

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Abstract: Health care in India is undertaken by huge numbers of providers - Government, Corporate and Private. Most of the providers do not maintain the medical records systematically and properly following international standards and guidelines. Paper-based health records and unavailability of right information at right time prevents better health care. Here comes the importance of health informatics. Developmental origins of Health and Disease (DOHaD), has proven the importance of records of individual in predicting/explaining the diseases. Dept. of Information Technology, Govt. of India, has taken initiative to develop Information Technology Infrastructure for Healthcare (ITIH) in India. ITIH provides the modalities and procedures to be undertaken for better health care of vast population of India. The framework is a guideline document and comprehensive roadmap that prescribes IT standards and guidelines for each stakeholder across diverse healthcare settings in India with the goal of building an Integrated Healthcare Information Network. The paper highlights the formation of expert group and terms of reference, defining the standards and guidelines, identified the nodal agencies, R&D organizations and healthcare applications. The importances of tele-medicine are also discussed. The paper has discussed the main challenges, namely, funding, computer literacy, infrastructure and coordination, retro conversion of manual system of records to electronic system, standards and guidelines, interoperability, privacy, information overload.

Keywords: Health Informatics, Information Technology Infrastructure for Health, India, Health care in India, Telemedicine, Mobile technology in health care, Healthcare Information Network

From Personal to Groups: Using EgoWeb to Map the Change in Librarian Research Networks

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Abstract: This presentation discusses methods for collecting, processing, analyzing and visualizing social networks using the software EgoWeb. EgoWeb is freely available, open source, web-based software that facilitates the collection of social network data through interviews. These interviews involve participants listing network contacts, responding to questions about each of the contacts, and evaluating the ties among contacts. This provides raw data for personal network analysis. Personal network data can also be aggregated to represent the extended networks of a group of people who share common network ties. The presentation will discuss considerations for each of these steps including how to use EgoWeb to best collect and process these data.
The methods and software will be illustrated with a project analyzing the personal networks of novice librarian researcher participants of the first and second years of the *Institute for Research Design in Librarianship* (IRDL). IRDL is designed to provide instruction in how to conduct a research project and establish a peer-network of like-minded librarians to support each other throughout the research process. The IRDL program is using personal network collected with EgoWeb to evaluate the impact of the institute on participants' research networks. The presentation will illustrate the value, as well as challenges, of combining the personal networks of participants to assess how the research networks of IRDL participants form and evolve over time.

The Future of Impact Metric Use among Collection Development Librarians

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Abstract: Collection development librarians often use metrics such as usage statistics, citation counts, and journal impact factors to inform their collection management decisions. How might newer metrics like altmetrics (data sourced from the social web that tells us how research is discussed, shared, bookmarked, and reused) complement those already in use? In this presentation, the authors discuss the results of a nationwide survey of US academic librarians working at R1 institutions that sought to understand the extent to which librarians use altmetrics in the course of their daily work. In particular, we examine collection development librarians' awareness of altmetrics and other impact metrics; how often collection development librarians are using altmetrics to make decisions regarding their collections; and whether the disciplines with which collection development librarians liaise have an effect on librarians' awareness of altmetrics. The survey results will then be discussed in the context of the challenges and opportunities that exist for the use of altmetrics in the future of library collection development practices.

The Future of Libraries: Physical Form and Cultural Role

Narjes Vara
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Abstract: The viewpoint of the librarian faculty members and PhD students regarding the physical structure and cultural role of the Iranian library will be investigated. We study the influence of changing information storage and retrieval technologies in future in this survey. We will use descriptive and analytical survey method by researcher-questionnaire. The results of this investigation will be analysed by the SPSS software.
Keywords: Libraries, Future, Physical form, Technology, Information storage

Future-proofing Through Programming

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Abstract: During its construction at the turn of the 20th century, the New York Public Library's main branch utilized a newly engineered structural system of load-bearing multi-floor steel shelving to house its collections. Structurally, the library's collections create a foundation for grand public spaces above. In recent years, library renovation plans have called for collections to be moved off-site and demolition of the structural shelving. Engineers, architectural critics, researchers and patrons bemoaned the removal of books and warned of the literal and structural collapse of the library.
Notwithstanding this specific example, the majority of public and academic libraries have been successful in migrating from exclusively analog services and collections toward integrated analog and digital resources. In academic libraries, students have embraced the ease with which library resources can be accessed from the comfort of their dorm rooms. While this ease of use has contributed to the increasing dominance of digital resources, it has also forced academic libraries to re-examine the way in which they use their physical space.
Although hindsight is an unfair position from which to question the New York Public Library's integration of new structural "technology" to house its collections, today this library can serve as a cautionary lesson regarding the hasty integration of technology in the design and construction of libraries. In an age where rapid technological advances inevitably lead to technological obsolescence, the arduous pace of library design and construction cannot possibly keep up.
For every new academic library, technology and design play a vital role in the long-term success -- but thoughtful library programming can be the most cost-effective and impactful way to ensure a library's future value to the academic community it serves. This paper will outline strategies for academic library programming and look at several recently completed projects in which thoughtful programming has sought to create lasting value in the academic library's utilization of collections, services, learning space, social space, amenities and technology.

Gamifying Business Information Literacy: Using Digital Badges to Incentivize the Acquisition of Business Information Skills

Jordan Nielsen
Business & Data Services Librarian, San Diego State University

Abstract: While librarians have used online methods to offer instructional content for at least a decade, many have found it difficult to actively engage users in the online environment. This presentation will provide a look at an online business information literacy program at San Diego State University Library. In the spring of 2016, the Business & Data Services Librarian at San Diego State University developed a series of modules within an electronic homeroom on the campus learning management system, Blackboard. The series of modules, a program called Business FIRST (Foundational Information & Research Skills Toolkit), introduces business students to various aspects of the research process and teaches them basic information literacy skills within business disciplines. Once modules are completed, students earn a digital badge that can be displayed on Blackboard, social media, e-portfolios, and/or other online platforms. In order to complete each module, students must complete an assessment activity that measures their understanding of a different aspect of business information literacy. The digital badges are issued with metadata attached; the metadata describes the activity students had to complete in order to earn the digital badge. The descriptive digital badges give students the opportunity to share/display credentials that demonstrate their mastery of key competencies. Each student who earns at least one badge will be surveyed to understand their motivation for completing modules in the Business FIRST program, and they will be specifically asked if the digital badges served as a motivating factor. This presentation will describe the creation and management of the Blackboard homeroom and the creation of the business information literacy modules.

Give Back to your Students! Methods for Authentically Assessing Information Literacy Instruction to Innovate your Teaching

Giovanna Badia
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Abstract: Authentic assessment of information literacy (IL) instruction evaluates students' abilities to research their genuine questions using the skills they have been taught in class. Rather than applying performative assessment by distributing feedback forms with multiple-choice or open-ended questions on sample topics, students can be asked to write down their own research topics, search their topics, and provide their search strategies as an example of applying authentic assessment. It is argued in the literature that students undergoing authentic assessment will also learn from completing the exercise since they are working on answering their real problems.

This type of assessment can be used in action research to implement positive changes in the classroom. Action research consists of defining the problem/question to study in class, planning the educational intervention and assessment, collecting data, analyzing the data, and reflecting on the findings to innovate or make improvements. The author authentically assessed students in a senior-level, undergraduate engineering course to determine whether students remembered, after a period of time had elapsed, what they were taught about literature searching and whether they could apply it to researching their own topics. The findings helped the author identify gaps in the students' knowledge, leading to the introduction and assessment of a new educational intervention in the IL workshop to fill these knowledge gaps.

This presentation will demonstrate how librarians can apply authentic assessment, within the framework of action research, to their own IL sessions with the purpose of innovating and improving their teaching practices. The speaker will also present lessons learned from employing multiple assessment techniques in the same course (e.g., pretests, post-tests, peer-feedback activities, students' search strategies).

Green Public Libraries as a Mean to Community Resilience in India- A Futuristic Study

Dr. Sabuj Kumar Chaudhuri
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Abstract: Public libraries are said as the people's university. They are the arterial system of the society indeed. Whatever best we want to deliver in the society for the society can be percolated through this system. In the recent past, the whole world including India is facing the wrath and scourge of nature i.e., climate change. It is inevitable everywhere. Scientists and policy makers are trying hard to save the world from these sufferings. Our every institution in the society has a role to play to commensurate with the policies to mitigate climate change causing factors and build resilience in the community. Public libraries are the most remarkable institutions can be of great help to build resilience in the society. Building green public libraries is the precursor of building this resilience. Inculcating green as a concept in the existing public libraries is not a very easy task as ours thinking to build libraries is stereotyped. We need to think out of the box and reinvent it as our most informed and conscious choice. It is not only a crying need but also compelling in its action. In every aspect of public libraries from collection development, infrastructure, energy, services to spreading and building resilience in the community must be driven by our commitment to mitigate climate change and its natural consequences like natural disasters. National Mission on Libraries (NML) in India, a part of the National Knowledge Commission (NKC) is presently being implemented and developing infrastructures of public libraries across India but surprisingly NML could not foresighted the issues and being implemented without this futuristic wisdom. The present study will investigate the whole issue based on the drivers require to build community resilience, set priorities and find out the way by which public libraries can become green in its present form and can fulfill our environmental commitment in its actions and manifestations.

Higher Education and Emerging Technologies: The Use of Mobile Devices for Academic Purposes among Students

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Abstract: Mobile devices are currently used to facilities to enhance or support learning in many higher learning institutions. Many studies have revealed that the use of mobile apps to support teaching and learning is a trend in higher education (Foti & Mendez, 2014; Cassidy, Britsch, Shen, & Turney, 2011; Coffin & Lyle, 2013). These studies also unveil that both students and instructors need technical, logistical, and pedagogical support for integrating mobile devices and apps in formal and informal learning environments (Chen, Seilhamer, Bennett, and Bauer, 2015). The purpose of

this proposal is to examine the role of mobile apps in 21st century higher education. A private college in Northeastern Kansas will be selected for this study.
In the past decades, the EDUCAUSE Center for Analysis and Research has conducted an annual survey to examine the technology experiences for college students (Coffin & Lyle, 2013). Based on the EDUCUSE's framework, a survey of student mobile application use will be developed to study students' mobile technology ownership, usage for learning, perception of popular social networking and Internet technologies, and as well whether students would like to utilize library services offered through these technologies. Prior to use the designed survey, pilot studies will be conducted to test the survey's validity.
The population for the survey include undergraduate on-campus and distance-learning students. The survey will be distributed via email and as well as announcements in courses that granted permission including the online, ground, and blended courses.
Keywords: Mobile devices and learning, Mobile app usage, Mobile devices for academic purposes, Mobile learning practices
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Hold it All Together: A Case Study in Quality Control for Born-Digital Archiving

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Abstract: PAD (Pavia Archivi Digitali) is a project developed at the University of Pavia aiming at long-term preservation of born-digital papers by Italian writers and journalists. The structure is part of the University library system and it complements the Centre for Research in the Manuscript Tradition of Modern and Contemporary Authors (Centro Manoscritti, Pavia University). The origin of PAD dates back to 2009, when a first collection of more than 16,000 files was entrusted to PAD with the intent of setting up a digital archive for the preservation of the otherwise undisclosed textual material provided by Italian authors, thus building a wealth of memories that, whilst providing sources for investigating Italian literature and culture of our time, could be extensively accessible to the scholarly community. Over the years, more archives have been bestowed to PAD, so that more than 67,600 files are currently preserved. Since the beginning, great effort has been devoted to the implementation of new technology and processes aiming at achieving better performance and allowing the acquisition of further materials. In fact, evolution in technology, use of different types and versions of software, ever changing storage techniques, from floppy disks to cloud services, tend to introduce severe challenges in securing collective and personal memories of the last decades. In fact, the project is inherently complex as it requires endless updates for its management. It implies the integration of fields that are

considerably different from each other: literature, archival techniques, information technology, and legal and administrative considerations.
The quality issue through an efficient management of the workflow is critical to the success of the entire project. Procedure supervision in PAD is supported by a locally developed Quality Control Software, dubbed QUANDO (Quality control for Archiving and Networking Digital Objects), based on the FileMaker platform, initially implemented as a stand-alone application and subsequently ported to a multi-user environment accessible via the Intranet. The software is mainly developed for personal computers and iPad tablets, but it can be accessed through almost any device. The software is able to manage all the aspects of the process, integrating information entered manually with data that has been gathered automatically using a PAD-developed application suite performing a variety of actions on every single archive: checksumming, antivirus scanning, metadata extraction, synchronization, etc.
Besides data treatment, QUANDO supports the many actions implied: acquisition of the files from the author's storage devices; convalidation and authentication; preservation management; coordination of staff (academic board, DAMS administrator, repository management, cataloguers, legal consultants); ongoing testing and improvement of the entire workflow.
Keywords: Quality management system, Quality control software, Born-digital archiving, Digital curation, Evaluation, Qualitative methods

How to Explore Trends and Challenges for Building Future Libraries

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Abstract: Libraries need to use several different methods when determining the needs and wishes of students and academic patrons for future academic libraries and documentation centers. In this paper, the authors report findings from a survey in Romania and interviews in Norway, on what innovative issues students are imagining in future libraries. Among the trends students and academics are foreseeing are found green libraries, including green information literacy, bibliometrics/scientometrics, library as "home", makerspace (3D-printing) and libraries as centers for documentation, for academic writing and for other necessary skills.
Keywords: Future libraries, Norway, Romania, Survey

Image Seeking and Use: An Overview of Research Designs and Data Collection Techniques

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Abstract: The increased use of images in the digital environment has sparked interest in image research in the library and information science field. The challenges of image indexing and retrieval have been at the center of this research. Information behavior of image users is a relatively new area of scholarly investigation. Seeking

and use of images is a subset of information behavior research, informed by the field's theoretical models and research methodologies, but is also gaining some recognition as a distinct area of inquiry. Research methods employed in empirical studies of image seeking and use provide insight into user's needs and actions. This presentation discusses the results of a content analysis study that examined the use of different research methodologies and data collection techniques in the empirical studies of information behavior of image users. For the purpose of the study, a sample of 70 empirical studies published in library and information science journals between 2005 and 2014 was reviewed and analyzed. The selected publications were analyzed systematically for the methodological approaches in research design, the use of data collection methods, types of user groups, and aspects of information behavior. The majority of the studies (66%) in the sample were conducted using quantitative methodology, 28% were qualitative, and a smaller number of studies (6%) undertook a mixed-method approach. The studies employed an array of data collection techniques with questionnaires and transaction logs as the most popular instruments. Questionnaires were used primarily in quantitative and mixed-method studies. Transaction logs were the second popular data collection techniques, used in 24 studies. They were mostly used in the experiments and studies analyzing search engines' logs to investigate search strategies and patterns in user image queries. Qualitative studies demonstrated a greater variety of data collection techniques. A combination of semi-structured interviews, observations, and content analysis, or focus groups and observations were used in qualitative studies to gain insight into user needs and image seeking behaviors. Interviews represented a primary data collection technique in the grounded theory studies. The analysis of publications in the sample demonstrates a wide range of methods, but that does not necessarily mean the use of multiple techniques. A surprisingly high number of studies (53 %) employed only one data collection method. Quantitative studies focused primarily on image searching, while a smaller number of qualitative studies investigated the use of images in academic, professional, and personal activities.
Keywords: Image seeking and use, Research designs, Data collection methods

The Impact of Online Searching Training on Information Behavior

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Abstract: Currently, libraries are also places of teaching and learning by offering training that enables users to utilize information retrieval systems in different areas of knowledge. But these training sessions have meaning only if they are effective in developing information literacy in users. The objective of this study is to evaluate the impact of 15 hour training on online searching of the MEDLINE database and of the BVS Portal on the information seeking behavior of graduate students and medical residents of the Health Campus in the Federal University of Minas Gerais. This was a descriptive study with a case study approach using both quantitative and qualitative data collection. The research used a non-random sample consisting of the masters students and medical residents who agreed to participate in the training. The research used various instruments to collect data in order to verify the changes in the first three levels of Kirkpatrick's training evaluation model. A questionnaire was administered at the beginning of the training to identify the profile, the experience and seeking

behavior of the participating students. Another questionnaire applied at the end of training, used the same questions of the first questionnaire about the informational seeking behavior to assess the impact of training on the information behavior of students. A third questionnaire based on the critical incident technique was answered by students between four and five months after the end of the training to assess the impact of training in their professional activities and educational activities. This work present only the results of this third questionnaire. The research results indicate a significant positive impact because the knowledge and skills demonstrated by students at the end of training were transferred to their professional and educational activities

Keywords: Information seeking behavior, Training impact, Research skills, Databases, Search strategy, Information retrieval

Implementation of Automated Library Management System (Koha) in the Library, Postgraduate Institute of Medicine, University of Colombo

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Abstract: The important function of any university library is to support learning, teaching, and research activities of its parent institution. Maintaining an ancient method in a medical library is no longer dynamic and effective in this technology era. To expedite the retrieval and dissemination of information and quick access using a modern technique has become absolutely indispensable. An automated library will help its readers with easy and quick access to all resources available at the library. To uplift the quality and quantity of services and to update the resources, postgraduate institute of medicine (PGIM), University of Colombo, decided to implement automated the library system using Koha library integrated open source software to carry out all functions in the library. The consultancy service on Koha automation received from Open University of Sri Lanka to come to the final decision. This automation was carried out in three stages. They are selection of suitable software, supportive service for installation, customization and staff training and maintenance with troubleshooting. Quotation was called from Open University of Sri Lanka. With the approval of Finance committee and Board of management of Postgraduate institute of medicine it was implemented. This paper aims to present the implementation process of Koha integrated Library Management Software at library, PGIM with the support of the Open university of Colombo. The software installed, staff members were trained by Library, Open University of Sri lanka and the data were migrated. All books were reclassified by using NLM classification scheme.(NLM).This online access is now available for public at pgim.lib.cmb.ac.lk. From this software and implementation of automated system at library, postgraduate institute of medicine it is found that this project will serve as a model for all health libraries. Any library whether small or large, school or public can make use of this software to provide maximum service in international wide.

Keywords: Automated Library Management System, Koha, PGIM, Open Source software, Library management

The Importance of Competency-based Management for New-Generation Library Managers

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Abstract: By the increasing effects of digital and information age, corporations need to develop their management style. In this context, new trends, environmental changes and applications specially in informatics, enforce the libraries privately new-generations ones to renew their strategies and improve their innovative capabilities. With the development of new technologies, products and/or services, instead of traditional management methods and applications, post-modern management ways started to be used in libraries. In order to realize this, library managers as information professionals, should posses new roles, skills and competencies. This study aims to provide a comprehensive outlook at the management phenomenon pointing out essential competencies for library managers especially in new-generation libraries.
Keywords: Library Managers, competency-based management, information professionals, new-generation libraries

Indian Universities are they at International Standards in World Ranking? Present Trend & Challenges: A Case Study of Selected University Libraries of Karnataka State and Institution of National Importance (Public) Indian Institute of Technology Libraries

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Abstract: In this paper I am going to present the total number of Universities, number of colleges, students & teaching faculty in India. (Up to this date we have 785 Universities 38,000 degree colleges within our nation but still we have less than 50 world level institution). Also I covered Institution of National Importance Like Indian Institute of Technology Mumbai & New Delhi. Libraries. Universities of selected Libraries of Karnataka is given. Brief information about higher education committee appointed & their recommendations is explained here. Reasons for lagging behind Indian Universities in world ranking are given. Recommendation of National Knowledge Commission on Higher Education. Language barrier. In International ranking is explained here. Shortage of Teaching Faculty is given here. INFLIBNET – Its Primary Objects. Using of UGC InfoTech N-LIST (Natioal Library & Information Services Infrastucture for Scholarly Content) towards development of Higher education. UNI-LINK Universities in Karnataka have joined hands to network all their Libraries. Yaspal Pannell report & its recommendation. Central Government Plan to RUSA (Rashtriya Ucchathar Shikshan Abhiyan) the main object of is to upgrade colleges to high standard. And raise the Gross Enrolment from 15% to 30 % by 2020. Central Government to fund 10 selected Institution of National importance these institution under 100 ranking in world ranking. Inviting foreign Universities in India to establish & give education so that bring standard of education to the international level. Keeping in these aspect a special survey has been made some selected Libraries of Karnataka and Indian Institute of Technology's of Bombay & New Delhi has been made a comparative study has been made between general education Library & Institute of National Importance has been made.. Some suggestion & lastly conclusion is given.

Keywords: INFLIBNET, Yaspal committee panel report, N-LIST, Institute of National Importance, UNI-LINK, Foreign Universities in India, Indian Institution of Technology Bombay, Indian Institute of Delhi

Individual Level Assessment @ Vienna University: A Bibliometric Service Put into Practice

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University of Vienna, Vienna University Library, Bibliometrics & Publication Strategies Department, Austria

Abstract: In this talk we present how bibliometric assessment at individual level can be implemented within academia by way of the Vienna University example. For all types of bibliometric assessment generally the Bibliometrics and Publication Strategies Department is in charge. Since its launch in 2008, this department has already successfully completed almost 40 individual bibliometric reports. According to the department's philosophy, bibliometrics is not only important as a complementary exercise in research assessment in order to balance the subjective nature of peer review. It can also be perceived as a valuable aid to orient oneself as a scientist in the harsh 'publish or perish' world. This is particularly beneficial for young scientists, who aim to increase their general visibility and therefore need to come up with tailor-made publications strategies. Positive adaptations and changes at individual level are certainly welcome for the institution itself, since the sum of increased individual visibility will necessarily increase overall institutional visibility. This could even be enhanced if effective policies (affiliation, publication strategy policy, etc.) were in place at institutional level.
Individual bibliometric reports inform the scientists about their quantitative research output and provide a basis for a more in-depth discussion concerning publication strategies.
The most important features of the Viennese bibliometric reports are its multidimensionality and its individual character. For each scientist an elaborated report is tailored according to the corresponding research field(s). This approach requires the selection and use of adequate data sources, the consideration of different publication habits and channels, and of course the appropriate and responsible use of the available tools for analysis and presentation.
Finally our approach relies on a portfolio of basic indicators and supplementary control parameters, in order to successfully tackle the multidimensionality problem and to foster comprehensibility.
Keywords: Library and Information Science, Modern librarianship, Academic library, Bibliometrics, Bibliometric services, Individual evaluation

Inducing Academic Data Bases Direct Use over Popular Search Engines

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Abstract: Proposes to directly prompt reputed database use over search engines by means of a 3D self test method and a Linguistic Storm. A 3D self test schema is used to make users aware of the existing data bases within their own libraries pointing to exploit them. The 3D schema consists of three graded axes that involve: a) users´s

academic level; b) electronic resources; and, c) linguistic steps to make the IR results pertinent, not repeated (relevant). Additionally, a brief didactic procedure to profit the library's collections is presented. Furthermore, some editors (Proquest, Elsevier and EBSCO) approaches to include their collections references into the popular search engine Google, are discussed. Finally, some remarks on the didactic procedure are included.

Information Behavior of Foreign-Born Students at Brooklyn College, City University of New York

Frans Albarillo
Brooklyn College, City University of New York, USA

Abstract: Little is known about the way that the experience of immigration shapes the research practices of foreign-born college students. This presentation reports on the results of a mixed-method study that investigates the information behavior of immigrant students using focus groups and surveys. The exploratory study looked at five variables: demographics, educational background and aspirations, library use, student experiences transitioning to the U.S., and language. Focus group data on language use was gathered in the spring of 2014, while survey data was collected in the fall of 2014. The survey had a 76% response rate (N=93). The data was analyzed using NVIVO 11 and SPSS 23. Key findings show these students reported high levels of public and academic library use, 75% and 95% respectively, in addition to high levels of multilingualism with 85% reporting using two languages, 41% reporting three languages, and 13% reporting knowledge of four languages. Half the surveyed population, 51%, believes there is an "American way of doing research." Focus group data includes issues around copyright and book pricing, plagiarism, and information code-switching (switching languages for a particular information task).
In addition to discussing the key findings of the survey and focus groups, this presentation will delve more deeply into decisions made in the data analysis plan for both datasets including how to improve the study's research design. Challenging aspects of conducting a study of foreign-born students include the sensitive nature of the data, the diversity of backgrounds represented in the population, and the reliability of self-reported data (especially if the study is conducted in English, the student's second language). This exploratory study has yielded some meaningful insights that the presenter would like to validate further using follow-up studies and a variety of methodologies. This is grant-funded study supported by the PSC CUNY Research Foundation.
Keywords: Foreign-born students, Academic libraries, Language use, Library use, United States

Information Need and Information Seeking Behaviour of Engineering College Students in Madurai - A Case Study

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Head, Department of Library and Information Science, School of Information Technology, Madurai Kamaraj University, India

Abstract: This case study investigated information need and seeking behaviour of information behaviour of engineering college students in Madurai. The main objective of study seeking behaviour of engineering college students to the information literacy

and study the purpose and motives of the students seeking information. Data was collected through a pre-tested questionnaire, using the snowball sampling technique. So only 300 respondents are used for in data analysis and interpretation. It was found that 55.33% respondents are using the library for Preparing for the examination, 38% respondents are suing the print copy and 81.33% respondents are using the pen drive. Libraries have always welcomed new changes for enhancing their services and satisfactory clientele's needs. It's a high time for traditional libraries that they change their approach as the availability of the digital resources is growing day by day. The paper suggests certain measures for improving information need skills of students to make them more competent information users

Keywords*:* Information need and seeking Behaviour, User study, Information sources

Information Needs and Knowledge Sharing as Correlate to Knowledge Utilization in Selected Teaching Hospitals in the South-West, Nigeria

Dr. Olugbenga W. Adewuyi , Dr. (Mrs.) Elizabeth A. Adekanye and Mrs. Stella C. Nduka

University of Lagos Library, Nigeria

Abstract: The paper examined the relationship between information needs, knowledge sharing and knowledge utilization among medical practitioners in selected Teaching Hospitals in South West, Nigeria. Descriptive survey research design was used for the study and pre-tested and validated questionnaire was employed as research instrument. The paper was discussed under the following sub-headings; Knowledge management life cycle in organizations and information needs. By extension, the paper strongly argued that there is a great nexus between information needs and other sub-sets of knowledge management vis-a-vis knowledge creation, knowledge sharing, storage of knowledge and knowledge utilization.

The paper was guided by three objectives, three research questions and two hypothesises. It was discovered that information needs, knowledge sharing and knowledge utilization of the respondents were very high and that there was significant relationship among all the tested variables. The paper recommended that management in Nigerian Teaching Hospitals should create knowledge bank that will enhance the information accessibility, knowledge sharing and knowledge utilization among staff as this will go a long way of improving health care service delivery.

Keywords: Information needs, knowledge sharing, Knowledge utilization, Knowledge management, Nigerian Teaching Hospitals.

Information Seeking and Sharing Behavior of Engineering Students of Pakistan

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Abstract: The purpose of this study was to know the information retrieving and sharing behavior of undergraduate (UG) and post graduate (PG) engineering students enrolled in various campuses of University of Engineering and Technology (UET)

www.uet.edu.pk, Pakistan. UET is well renowned and Pakistan's Higher Education Commission's recognized engineering school of Pakistan which offers multiple engineering programs in its various campuses established in major cities i.e. Lahore, Faisalabad, Taxila, Gujranwala etc. of Pakistan.
In the current era, students use various channels for retrieving and sharing the academic information. Review of the literature revealed that social media, group discussions, digital libraries etc. are being used to share and access the required educational information. On the basis of reviewed literature, a semi structured survey questionnaire was developed to collect the data from students of University of Engineering and Technology (UET), Pakistan. At the moment, we are collecting data from the students of multiple campuses of UET. Findings of this study will be helpful to identify the information sharing and seeking trends among the engineering students of UET. This study will also play a vital role in identifying the students' problems in accessing and sharing of information. Study will also play a key role in guiding the engineering schools and libraries and other information stake holders to analyze their strategies to cater the modern academic needs of their users. This study is unique in terms of its nature and topic as, prior to this, not a single study is ever conducted on the UET' students of Pakistan.
Keywords: Information sharing, Resource sharing, Information seeking, Knowledge sharing

Information Sharing and Use Behavior in Travel Virtual Community

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Abstract: Due to the growing popularity of the Internet, people's contact and interaction are forged from the reality to the Internet. Various types of activities could be carried out over the Internet. The nature of multi-directional networks, providing a variety of information sharing channels. Virtual communities grow rapidly and have become one of important platforms for information sharing. The development of virtual community enables information access and retrieval to be even faster and more convenient. Because the characteristics of travel information, which is rapidly changing, more and more people acquire information through travel virtual community that makes Travel virtual community become one of the major sources for travel-related information. In order to reveal the information sharing and use behavior of participants of travel virtual community, the authors take the approach of netnography, and adopt non-participant observation and semi-structured interviews for data collection to investigate information sharing and use behavior occurred over Backpackers Korea Forum.
The research results indicate that there are three types of participants on Backpackers Korea Forum from viewpoint of information sharing, information owners, information seekers and lurkers. Among three types of participants, the most common role is the lurker. Information owner is likely to initiate information sharing, especially information about shopping and his/her own travel notes, and information regarding traffic, itinerary and accommodation will be told on request basis. Information is presented either through single and multi-postings. For information seeker, traffic and itinerary are the top two topics requested. Major reasons for participants to share

information sharing are altruism and mutually beneficial for future needs. Regardless of the role of information seekers' grade level, 'call for information' needs greatly trigger information owner's willingness to share information, especially for factual information; polite wording and clean typography also encourage information sharing. Various types of information use behavior are observed, including browsing, selecting, evaluating, excluding, keeping, retrieving, recomposing, using and re-sharing information. Before taking further actions, participants evaluate the usability of information through information currency and cross validation. With the influence of personal characteristics and needs, the participant takes the next steps for information processing. Based on the findings, participants' information sharing and use behavior processes and models are also constructed in this work.

Keywords: Information sharing, Information use behavior, Travel virtual community

Informational and Documentary Practices around Training and Cooperative Devices for Creators of Economic Activities in the French Universities

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Abstract: In France, the role of Universities has changed. They try to promote the creation of new economic activities in relation with attraction of new publics especially coming from disadvantaged areas in great town suburbs particularly unemployed young people. In this paper, we will present the experiment of DUCA (Creators of Activities University Degrees) around cooperative devices or GC (Creators' Groups). These DUCA / GC correspond to an individual project part of global dynamic in a collective approach. In a rebuilding perspective of the person in a project dynamic of creation of economic activity, information gathering and communication and documentation issues are central.

Keywords: Universities, New publics, Economic activities creation, Young people, Unemployment, Universities social responsibilities

Innovative Data-Driven Methods to Improve Digital User Experience

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Abstract: Digital user experience (DUX) is a combination of art and science. From an artistic point of view, DUX should provide a simple, clean and engaging web or mobile interface. In order to design such an artistic interface which guarantees the best user experience, scientific user research must be conducted to better understand users' needs, their motivation to use websites, as well as their web behavior. This paper will explore new trends of qualitative and quantitative user research methods in each DUX stage in order to build excellent user experience on the library website.

In general, DUX is comprised of 6 stages: Planning, user research, design, development, launch, and quality control. At Indiana University Purdue University Indianapolis (IUPUI) University Library, a variety of qualitative and quantitative usability research was conducted in different settings. This, along with data from Google Analytics and Google Webmaster Tools, were used before launch in order to know the users. After launch, user experience research was conducted during multiple library instruction sessions to ensure users had a good experience on the website. This paper will address diverse user research methods and discuss tools used during DUX research conducted from January 2014 to December 2015. In addition, the paper will compare pros and cons of DUX methods; discuss practical tips on how to apply data gathered from user research to design and improve websites; and share lessons learned such as DUX research planning, challenges, and effective methods in each DUX stage.
Keywords: Digital user experience; DUX; User-centered design; Qualitative UX methods; Quantitative UX methods; Academic library website

Institute of Research Design for Librarianship: Developing a Curriculum for Novice Librarian Researchers

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Abstract: In LIS and other disciplines, the role of research in improving practice is well acknowledged. Research creates new knowledge and contributes to the growth of a profession. It helps librarians provide optimal services to users and yields insights on how well library programs, services, and collections are functioning, allowing libraries to be more responsive service organizations (Hernon & Schwartz, 1995). Furthermore, many academic librarians must published research in order to meet promotion and tenure requirements. Yet librarians face a variety of obstacles when conducting research, such as lack of time, unfamiliarity with the research process, lack of support (both moral and monetary), lack of access, lack of confidence, discouraging jargon, inadequate education in research methods, and lack of motivation.

In an effort to address issues related to the above obstacles, a federally- funded program titled Institute of Research Design for Librarianship (IRDL) was developed to provide research methods training for academic librarians. In the summers of 2014, 2015 and 2016, IRDL gathers a group of academic librarians who have written research proposals and been selected through a competitive process from around the country and provides them with 9-day intensive training on research methods. The curriculum focuses on components of the research process, with special attention given to areas that a 2010 national survey of academic librarians identified as the most troublesome (Kennedy & Brancolini, 2012). It consists of expert instruction, small group activities and one-one-one consultation between instructor and participant. In the following academic year, participants continue to receive support in conducting their research and preparing the results for dissemination.

In this paper, we will discuss the process of developing the IRDL curriculum, the mapping between the assessment of participants' research confidence and different parts of the curriculum, and the role of personal learning networks. We hope our experience will yield insights on how to effectively and efficiently equip librarians with research knowledge and skills, promote the research culture and research-

mindedness among librarians, and ultimately enhance the rigor and quality of library research

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International Quality Measures of LIS Education Programs and the Impact on the Future of Libraries in the E.U. and the USA

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Abstract: As education for library and information science (LIS) professionals has become more international in scope and as graduates of LIS education programs have expanded their interests in job opportunities beyond the boundaries of their home country or region, the question of appropriate measures for assessing and comparing the quality of LIS professional educational programs in this era of digital information and education delivered electronically on the internet, the question of whether it is possible to develop measures to assess the quality of such programs that would permit an international system of assessment that would provide reciprocal recognition of the quality of professional degrees in LIS becomes ever more pressing. Many countries or regions have their own quality assessment programs, such as the accreditation of LIS programs in the USA and Canada and the certification of individuals by CILIP in the U.K.

This paper reviews the history of quality assessment of LIS Professionals and explores the possible methodologies that are currently used in some areas of the world and might be adapted to an international method of International Quality Assessment of LIS education programs that wish to participate. Both Qualitative and Quantitative measures are examined and analyzed as to their potential value and appropriateness for international assessment. Specific recommendations are made as to the measures that should be considered and strategies for implementing an international quality assessment program will be outlined.

Keywords: Quality assessment, Library and Information Science education, Job placement, Information careers mobility

Investigating Managerial Skills of librarians in Malaysian Public University Libraries

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Abstract: The effectiveness of organization in achieving its objectives can be employed by applying management knowledge to management functions. However, current studies show insufficient managerial skills among librarians which contribute to low job performance. Consequently, low job performance of librarians leads to decrease the library's achievement and productivity. Therefore, this situation enforces university libraries initiative to enhance skills of the librarians in the country. In this study, the managerial skills that are demonstrated by librarians in the Malaysian public university's library are investigated. This is due to the importance of the public university library as the main function for supporting research and development of universities. The study aims to investigate the managerial skills in improving their job performance among Malaysian public university librarians. The managerial skills typology differences are compared based on demographics factors including age,

gender, experience and management rank. The respondents are selected from ten public university's libraries in Malaysia. These libraries are selected based on the university rank listed by the Ministry of Education in Malaysia. This study employed a quantitative approach of structured questionnaire to investigate the managerial skills demonstrated by the respondents. Data will be analyzed using SPSS software. The results will be presented both in descriptive and inferential statistics. Thus, this study is significant to the field of library and information science on the practical, theoretical, and methodological contributions. It will help to find out current managerial skills among librarians and assess their proficiency level of skills. It is also will be as guidelines for planning, designing, and developing relevant training and development program for upgrading the competency level of their librarians and as a criterion for selection and promotion. Moreover, this study will also contribute into improving the research instruments and add new literatures not only significant used for library and information science and also other fields of study.

Keywords: Managerial skills, Job performance

Investigating the Level of Health Literacy, the Way of Information Locating, and Information Accessibility among Diabetic Patients: A Case Study

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Abstract:

Aim/Background - Health Literacy is one of the most important subjects, concerned by World Health Organization (WHO), which could be related with the rate and the way of information accessibility. One of the main purposes of the health systems is an increasing the users' ability for acquiring, processing, and perceiving health services and information. The present study aims to investigate the level of health literacy, information locating, and information accessibility among diabetic patients in Mashhad Municipality.

Methodology - This case-study research was conducted by survey method used descriptive-analytical approach. The population included 400 diabetic patients attended Mashhad Health Services Center. Among this population, the patients who hadn't reading and writing ability were removed and the rest of patients (=100) were selected as a sample of the study. Data were collected by Test of Functional Health Literacy in Adults (TOFHLA) and analyzed using SPSS software.

Findings - The results showed that the rate of the health literacy among diabetic patients attended Mashhad Health Services Center was insufficient; in other words, 93.3 percent of women and 84 percent of men received the low score (<60). Other results revealed that patients with insufficient health information about diabetes had received most of their health information from "physicians and nurses" (52.7%), and then "attending health services center" (54.9%). In 2nd and 3rd rank, these patients received their health information from "TV and radio" (23.1%) and "family and friends" (4.4%) accordingly. Additionally, hypothesis test indicated that there was a significant relationship between the levels of the diabetic patients' health literacy and the type of information resources and accessing information.

Conclusion - Diabetic patients of this study haven't favorable and sufficient health information and using same behavioral patterns for health information accessibility.

Keywords: Health literacy, Information resources, Information accessibility, Health information, Diabetic patients

An Investigation into the Use of Mobile Phones for Health Information Delivery to Rural Women in Uganda: A Case Study of Albert Cook Medical Library

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Abstract: The study investigated the viability of using mobile phones by an academic health library to provide health information to rural women. Access to information by individuals is essential in reducing people's levels of uncertainty especially in matters that relate to growth and survival such as health.
The central research question upon which this study was based was, "How can an academic library adopt the use of mobile phones as an information delivery device to enhance access to health information for rural women?" with sub-questions focusing on information needs and sources of health information for women and the adaptation of mobile services within the library. It further looked at appropriate partnership needed in developing mobile services for health information delivery.
Reviewed literature revealed that mobile phones are already being used by several organisations in making available information. In particular academic libraries have embraced the mobile revolution by creating mobile services for their users.
A qualitative approach was adopted for this study and interviews were used for all the three categories of respondents, who are rural women from Buyengo sub-county, health workers from Kakaire health centre iv and librarians from Albert Cook Medical Library.
Findings from the study show that in the information era where one's survival is highly dependent upon information, rural women do not have access to credible sources of health information despite the fact that they have high demand for health information because of the soaring disease burden in rural areas. The study without doubt has led to the establishment that the use of mobile phones to fill this gap is a cost effective and life saving venture which if well set up and implemented will add to the global programmes initiated with the aim of reducing child mortality, maternal deaths and combating HIV/AIDS, malaria and other diseases.
Keywords: Academic libraries, Health information, Health librarians, Health workers, Mobile phones, Mobile services, Rural women

Knowledge Sharing and Social Web

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Abstract: In an ever changing world we need each other more than ever. With social networks like Facebook and Linked IN we have a platform for keeping causal contact, with twitter and micro blogging we can easily pass on ideas and thoughts. But what do professionals really need for knowledge sharing? In the old days they were seeking advice and knowledge from professional associations but now they are reaching out to the community and creating ad hoc networks distant from professional associations. Sociologist C. Shirky (2003) describes social software as software that supports group

interaction and presents more than just technologies. According to Bawden and Robinson (2012) the major change in communication is in the way in which information is recorded and communicated. The question raised is what type of knowledge is shared in this groups compared to the knowledge shared within the professional association.

The authors analyze generated networks of professionals in social web based on the Wengers' theory of communities of practice. Communities of practice by definition are groups of people informally bound together by shared expertise and passion which can be mapped to the philosophy of the origins of professional association. The changes in the communication models of professional and their utilization of social web brings new insight in the knowledge sharing within and outside of professional associations. Based on the analysis of the group dynamics, activity, content and communication frequency the differences between traditional modes of communication and knowledge sharing of professionals will be shown and discussed. Furthermore, the phenomenon of collective intelligence or wisdom of the crowd and the relation to knowledge transfer will be discussed.

Keywords: Knowledge sharing, Social web, Communities of practice, Communication

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The Lithuanian Libraries' Future: Scenario Planning for Developing Strategies

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Abstract: During the last decade one can observe an increasing growth of publications dedicated to library future in general and specifically to scenario planning as a mean to envision the future. Most efforts of scenario and any other future-oriented thinking are motivated by the anxiety about library roles in the changing society and desire to use planning instruments for creating the niche for libraries in future, coping with an intellectual challenge of distinguishing major drivers of change and their impact on libraries. The turn of library researchers and practitioners to scenarios as tools of strategic planning can be explained by several heavily quoted advantages of this method. It provides a guided and disciplined framework for thinking of complex and 'fuzzy' issues; builds on individual creativity, imagination and insights; allows exploration of different paths of possible and plausible changes in future; expresses complex issues as appealing and easy-to-understand stories about the future. The aim of the presentation is to analyse the major changes, opportunities and challenges that will affect the development of the Lithuanian public, research and special libraries in 2023. The presentation is based on scenario planning research carried out in the large-scale national project LiBiTOP in 2012-2013. The findings revealed that conditions of information access and involvement of libraries into the implementation of the national strategies will have a significant impact on the future demand of library services in Lithuania. Major opportunities for the development of libraries in future included a presence of issues in acquiring and use of information experienced by users and the state support to

libraries. Threats covered high expectations and requirements to library services, high level of competition in information sector, and decreasing allocation of resources to libraries. The findings of scenario planning research could be usefully employed to develop the library responses to opportunities and threats and identify strategic alternatives for actions under different scenario conditions.
Keywords: Libraries, Scenario planning, Strategic management, Lithuania, LiBiTOP

Leveraging Service Learning Projects to Gather Data to Create Future Libraries

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Abstract: Service learning is an authentic experience that provides students with an opportunity to meaningfully apply the skills they have learned in a practical and professional setting. This accords well with the goals of academic libraries, while academic libraries are uniquely positioned to leverage student service learning projects. Libraries can work with service learning efforts to gather needed data, improve library design and contribute to student learning. At the same time students can be given invaluable professional experiences. While service learning won't be right for every project, it has affordances that can make it an effective tool for libraries interested in gathering data, user-generated designs, and user feedback. In particular, service learning involves stakeholders of the academic library directly, and provides unique insights into user needs and wants for service and design projects. Users can be more forthcoming when talking to their peers rather than intimidating librarians. Service learning projects are particularly suited to discrete short term user experience and design analyses that can be finished in the timeframe of a single semester. This presentation will outline three cases of using service learning to improve the University of Colorado (CU) Boulder Libraries' design and outline how these type of projects can be leveraged at other institutions.
At CU, we connected with an existing design-focused service learning course, in which community members are invited to propose projects and act as clients. While the CU libraries have a user experience working group, limitations of staff and time prevent the group from addressing all the projects that would benefit from user feedback. Moreover, we often want to benefit from the different kinds of feedback users give to their peers, and working with student design teams provides us access to this unique perspective. We proposed client design projects for various library spaces spanning locations and disciplines. The data gathered by the students supplemented our own data gathering, highlighted areas for future research, and were used to support arguments for changes and reinvestment in these spaces. The students not only gathered data but also proposed design solutions presented in a tiered model depending on funds available. Their unique perspectives produced interesting ideas spread across the spectrum of practicality. As students were drawn from a wide range of backgrounds this gave us a particularly rich variety of inputs and solutions. We believe that service learning is a powerful tool for libraries that provides authentic learning experiences for students and rich data for libraries.

Libraries and Books as Cultural Goods

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Abstract: From a historical and sociological point of view, the libraries collections, especially its rare and special books collections, are a cultural good. The Brazilian Constitution, Brazilian legislation and international organizations have been addressing the cultural heritage increasingly broad and clear. However, the book and even more libraries are not clearly among the items to be preserved. The bibliographical heritage is always associated with the rare book, considered in its unity. There is a lack of discussion and legal cover as the bibliographic collection as a heritage to be preserved. The rare book, although in a limited way, has already been considered bibliographical heritage, in unity. The absence of an overall view is prejudice to the preservation of library collections. A more detailed discussion of the identity of the bibliographic collections as cultural heritage is essential to support legal texts, as have been done to other kinds of heritage. Based on the legal texts on books and libraries, the paper discusses the legal lack identified, and its relationship with the role of libraries and librarians in the preservation of bibliographical heritage. It is the duty and mission of the various organizations and public institutions nationwide to preserve, to conserve and to give access to its historical collections to society, to develop research and to rescue elements of the cultural history of the people. Libraries and librarians are in charge of the identification of historical and cultural value of their collections. The identification is compound of several closely related aspects: from the traditional aspects of Rare Books Librarianship, highlighting and adding the provenance of their collections and their items (their donors or former owners), the history of their collections, the history of its donors, its role and importance within the collection, its importance and uniqueness comparing to other collections in the same area, their relationship with the institution, its mission and its history.The identity of a bibliographic collection is the result of this web of relationships. In Latin America, the issue of identification and preservation is specially relevant, though the story of their collections are more recent, they have not suffered from aggressions and wars they have received collections of the Old World.
Keywords: Libraries. Rare and Special Books. Bibliographical heritage. Cultural Goods. Cultural heritage.

Library Metrics: Studying Academic Users' Information Retrieval Behavior - A Case Study of an Israeli University Library

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Abstract: The academic libraries of the 21st century are able to take advantage of the Internet to make information more available to their users. The technology also enables gathering information about online usage from web analytics. The purpose of the study was to get insights on library users' information retrieval behavior. The study focuses on quantitative analysis of data and analyses log files of library patrons' information retrieval behavior. The study utilizes data collected from the open URL link resolver system used by the library (SFX by Ex Libris), from the publishers'

COUNTER report on full text downloads accessed through the library's subscriptions and from Google Analytics on web site visits. Data were provided for the period between January 2011 and June 2014.

The study shows that the library's discovery tool is not the major source for accessing full text items. Data collected from publishers reports (according to The COUNTER standard) and the discovery tool full text requests, indicate that patrons access full text items from other information sources (such as Google Scholar and publishers' sites) 3.1 times more than accessing full texts from the library discovery tool. The huge difference between the use of the library discovery tool and other search interfaces (assuming the main alternative is Google Scholar and not publishers' sites) is well supported by the literature. Google Scholar is the patron's preferred choice for searching, locating and retrieving information, but the fact that it can link to library subscriptions, enables the library to be the provider of its patrons information needs. Further and detailed analysis of the full text requests registered from the library discovery tool indicates an increase in use over time, as a mean of full text access and retrieval.

Findings from Google Analytics comparing the library's home page sessions with the sessions count of the search box, indicate that every second user on average who enters the library web site also uses the federated search tool.

The study concludes by suggesting that libraries should consider further analysis of patrons' retrieval behavior and change their discovery tool interface, accordingly. The analysis of the usage data enables a better understanding of the patrons' information needs and behavior and shows that the role of the academic library for providing information to its users is changing from being information intermediaries to enabling smooth access to information needed by its patrons.

Library Websites as Source of Marketing of Library Resources: An Empirical Study of HEC Recognized Universities of Pakistan

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Abstract: The purpose of this paper is to analyze the current status of the university libraries in Pakistan. It is focused particularly on HEC recognized public and private sector universities. This paper will describe that at what extent libraries of the universities are relying on the website for communication with the student and for marketing purpose. For analysis in this study university library websites are extensively reviewed to gather the required information in accordance with the described feature. Total of 148 universities sites are reviewed which were further divided on the basis of direct and indirect link of the web sites. Libraries websites were examined by the authors to gather the information regarding there use as a tool of marketing towards the students. This study identified that universities library websites are not fully developed in terms of using them as a marketing tool. This study also reveals that these website have lack of information and also don't have collaborative interface with the users so that they can directly communicate with the end users and get the feedback for further enhancement in the technological development of the library. Finding of this study is limited to the universities that were recognized with the Higher Education Commission of Pakistan. It is difficult to generalize the result in other regions. This paper will be a step forward for the

libraries to use the website as a marketing tool so that the libraries enhance their image by increasing their promotion and advertisement. This study will be helpful for the libraries in Pakistan. Common libraries also use this research finding to increase their users.

Keywords: Information service, Higher Education of Pakistan, Marketing, Library websites

Library Websites of Pakistani Universities: An Exploratory Study

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Abstract: Library websites are built to provide information to its users remotely and are platforms to offer many electronic services to its valued members and users. Library websites of Pakistani universities recognized by the Higher Education Commission of Pakistan are explored to find out the existence of library websites and their features. Through the review of literature a check list is prepared and then websites are surveyed and features found on them are reported against the checklist. Higher percentage of university library websites exists in public sector as compared to private sector institutions. A significant number of library websites found having less than three pages. Website aid tools including site index and FAQs; instructions/ tutorials about library use and information about library newsletter are rarely found on library web pages. More than 95% libraries are providing access to HEC digital library but university own-subscribed digital resources are very rare. Use of Web 2.0 including facebook, youtube, twitter and RSS feed are found on only few (19%) library websites.

Keywords: Websites, Library websites, Web 2.0, Universities, Pakistan, HEC digital library

Looking back to face the future: historical background of the national conferences on legal information and documentation in Brazil

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Abstract: Librarians' national conferences and meetings are privileged local and a time for knowledge sharing, as well as professionals' organization. The work is an effort to compile information about the national events on legal information and documentation in Brazil, which have been held for just over four decades. The first legal information event in Brazil emerged within a national congress of Librarianship in Brazil, in 1971, with the meeting of law librarians present, resulting in the formation of a specialized committee, the CBDJ (Brazilian Commission on Legal Documentation). The research focused on FEBAB (Brazilian Federation of Librarians' Associations) archives, personnel archives of librarians, complemented with filled out questionnaire by CBDJ' Former Presidents and national events' Coordinators, with the authors experience plus some articles. Three moments represented by three different series of events were identified. ENBJ (National Law Librarians Meetings - 16 events from 1971 to 1994), ENDIJ (National Meetings on

Legal Information and Documentation - 8 editions from 1984 until 2003), and SNDIJ (National Seminars on Legal Information and Documentation - 4 seminars from 2007 to 2013). National events on legal documentation and information are consolidated as an undeniable way to strengthening the legal field, as well a major channels to works presentation for information professionals, and as space for disclosure, dissemination and exchange of experience among Brazilian law librarians. Although there are issues in institutional infrastructure, organization, preservation of memory and leadership formation, there is continuous realization of meetings, being a national, regional or specialized event. Looking back to the previous experiences may help us to face the future and the present challenges of Law Librarians' Organization in Brazil.

Keywords: National Conferences of Librarians. Legal Information and Documentation. Brazil. History. Law librarians' Organization.

Manifestation of Learning Commons in Academic Library: Case Study of Vilnius University Library

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Vilnius University Library, Lithuania

Abstract: The research aims to evaluate the relevance of academic library services for students to achieve their study goals. In pursuance of this aim two tasks were singled out. The first one was to evaluate level of learning commons implementation in academic library by its capability to help students to achieve their study goals. The second one was to determine the predominant aim of academic library services use. Information user's survey was used to solve the tasks. Vilnius University Library was chosen as a place of research.

Vilnius University students from all study levels were chosen. Cronbach's alpha was calculated to assess reliability of the survey questionnaire. Shapiro–Wilk was used to test normality. Spearman correlation coefficient was used to determine correlations between different study goals and different services. For comparison of different levels of degree studies, the Mann-Whitney U test was used.

It was found out that Vilnius University Library services are modelled aiming to implement conception of learning commons. However needs of Vilnius University students needs and evaluation of library services show that Vilnius University Library is in transitive state from implementation of conception of information commons to learning commons or from focus on passive to active learning. Analysis of survey results showed that library services related with group work, collaboration, and non-formal communication were less necessary for seeking students' goals. On the contrary, services intended for individual work were considered to be the most relevant for achieving their study goals.

Keywords: Learning commons, Academic library, Learning center

Marmara Visual Memory

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Abstract: Corporate archives are important to preserve institutional culture and record its history. Since universities in Turkey have started to bring their academic side to the fore using marketing techniques to improve their success, various stories about institutions have started to rise in number. Studies have shown that, Marmara University, whose roots can be tracked down to 1883, does not have a visual archive yet. The aims of this project is to take the first step by starting an institutional visual archive for Marmara University and to start a sustainable study. Within the framework of this project, photos which were taken between the years of 1982 and 2014 and took taken place in national press and found in private archives are identified and transferred to the newly established Marmara Visual Memory database.
Keywords: Archive, Visual memory, Corporate culture, Identity, Digitalisation

From Measures to Impact: Approaches to Assessing the Impact of Academic Libraries using ISO16439

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Abstract: Academic libraries increasingly need to demonstrate to their various stakeholders and their funders that even in the virtual environment they form an essential component of the higher education enterprise and that they add discernable value to students' academic experience and the institutions' own academic output. In order to assist libraries in demonstrating and quantifying their contributions to the institutional endeavor, the International Standards Organization in 2014 published *ISO 16439 Information and Documentation: methods and procedures for measuring the impact of libraries*. This document was intended to be a definitive statement on methods and approaches to impact measurement and assessment in libraries. The current proposal is for a presentation that will provide an overview of this document and explore its suggested methodologies for conducting impact studies in academic libraries. Although traditional library counts and measures by themselves do show how the library adds value to the institutional enterprise, the possibilities for developing them into impact indicators will be explored. Well known library statistics such as circulation, collection size, gate counts and investigations such as LibQual will be considered to see how they can be used to generate indicators of impact. Some of the approaches suggested by *ISO16439* for specifically targeted impact assessment investigations will be considered as well. Specific investigations conducted by the University of Cape Town Libraries will be used to illustrate some of our own issues in this regard.
Keywords: Academic libraries, Impact assessment, ISO16439

Measuring Satisfaction of Children and Adolescent Users

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

Metadata Framework for Online Legal Information System in Indian Environment

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Abstract: The study illustrates the metadata structure of Online Legal Information System (OLIS) developed to suit the Indian environment. OLIS contains various types of legal information resources so that lawyers, research scholars, students and the common masses can get the information expeditiously. OLIS is accessible online at http://www.olisindia.in. It has provision of various search features and compliant with Web 2.0 tools. The metadata structures of OLIS are discussed in detail in paper. The system contains 19 types of resources pertaining to judicial and legislative information. Each database has different metadata framework so that desired information by legal community and common mass can be retrieved with precision. In addition, a number of operations such as, latest news, online help FAQ, query submission, online discussion form for help and video tutorials have been integrated in OLIS. The study discussed that metadata elements set in managing judicial and legislative information is different compared to other type of scholarly information.
Keywords: Legal Information System, Judicial Information, Legislative Information, Meta data, India

Metadata Quality Assurance Framework

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Abstract: In several large digital collections the only way a user could access a digital object (such as a digitized cultural heritage material or a born digital research data) is via its metadata. If metadata is not precise, contains inappropriate or less information users miss the object, and the data creators' energy they put in the creation and maintenance of it will not lead to results. In past years there were research projects

about the quality of metadata: defining what it is, how to measure it and suggesting methods to improve it. However nobody created any open source tool, which the organizations facing the problem could use. In 2015 several organizations put more energy to handling the problem: Europeana, the Digital Public Library of America and even W3C. My PhD research project aims to create an open source implementation of the measuring (named as Metadata Quality Assurance Framework), which is flexible enough to work together with different kinds of metadata schemas (see the result and source codes at http://pkiraly.github.io/). It is scalable as well, so fit for small organizations up to big international consortia. The tool is implementing (and in some cases even improves) the theoretical results. The main result would be if the organizations could improve their metadata and thus their services with the help of the tool. In the current first phase the tool investigates the collection of Europeana: 48+ million records, 410 GB raw JSON serialized files. The collection is quite heterogeniuos: the data come from more than 3500 institutions, so it holds the effects of so many local cataloguing traditions. The tool is built on Apache Hadoop ecosystem, and Apache Lucene based search engine and consists of Java and R modules. In the research we work closely together with Europeana's metadata experts and the Europeana Network's Data Quality Committee. In the presentation I will show some metadata issues, the proposed and implemented metrics and the current results of the tool.

Model for Achieving the Indicators for Influence in Scientific Areas of Bulgarian Academic Journals

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Abstract: The scientific report examines new opportunities for the Department of Library and Heritage in SULSIT created by the project "Redesign of academic journals in accordance with indicators of impact factor and indicators of the achievement of intelligent growth in the modern knowledge society". Thanks to the implementation of planned activities it was created a new practical model for achieving the indicators for influence in scientific areas of Bulgarian academic journals which publish Bulgarian authors. Tools were created for redesign the scientific publications and for acquisition of scientometric knowledge and analytical skills of scientists who write with which to achieve a high impact on Bulgarian science. The studied models and good practices related to scientometric studies in Europe and Bulgaria for achieving impact factor of Bulgarian scientific journals as well as high levels of indicators derived from impact factor were generated in different scientific research products. Two manuals were written, edited, reviewed and issued whose content is consistent with recent research on successful issuance and maintenance of journals with impact factor for the successful publication of Bulgarian scientists in highly influential publications. There was accumulated rich matter of information and knowledge in order to serve in the future for scientific research, curricula, conceptual designs and more forms of scientific exchange. The created application for redesign, counseling and skills training provides easy and convenient

access to information on the subject of the project - redesign and publication skills. The completed activity presents serious scientific excellence and promotes scientific communication related to the publication problems, influence of publications, the citing, the impact factor of the scientific publications, promotion of scientific results in the field of humanities and social disciplines.

Keywords: Bibliometrics, Impact factor, Science-metrics, Indicators, Innovative strategy, Intelligent growth, Applied-science products, Knowledge society, Redesign, Case Studies

Multi-Source Data Fusion Study in Scientometrics

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Abstract: The scientific literatures are the important research objects in *Library and Information Science*, especially in *Scientometrics*. However, there exist some deficiencies in the analytical methods used in the literatures with a single type or the relational data. Actually, the scientometric methods based on a single relation can only reflect a limited understanding to one domain of science from a certain perspective, and each relationship usually provides the researchers with a partial and unbalanced characteristics of one research field. Therefore, it is necessary and helpful for the researchers to fully understand a research field from different perspectives. Multi-Source Data Fusion (MSDF) with an integration of multiple data types and relations could contribute to a comprehensive understanding of the field. Bibliometric relationship like the citation, the coauthors and the topical words can be used to not only describe the relationships among the literatures, but also to identify the associations among the authors, the journals and the institutions. Nowadays, with scientific literatures rapidly growing, the scientific literatures with multi-type have become the valuable data resource, while the relation patterns are constantly enriched. In addition to the citation and co-author relationship, the analytical methods of various coupling relationship are also added into the scientometric index pool. However, there is only a little research on the fusion between two types of relationships, and almost no research on the fusion among three or more types of relationships.

With the amounts and types of scientific literature increasing, MSDF has become more necessary and more meaningful. The aim of the proposed paper is to fully explore the status quo of the methods and applications of MSDF in scientometrics study. Currently, one of the most widely used methods of MSDF in scientometrics is the linear mode with a simple and random fusing process. In this paper, we assume that the improvement of the MSDF methods requires a solid mathematical foundation, and the breakthrough of MSDF in future may come from the fields which are the advanced fields in data fusion research and its application, such as the sensors, the automation, etc. Based on this assumption, we have investigated the main thoughts of MSDF used in those fields and proposed that MSDF could be divided into the fusion of data types and the fusion of data relations. Furthermore, the fusion of data relations could be divided into cross-integration of multi-mode data and matrix fusion of multi-relational data. We studied the methods and technological process of MSDF

applicable to information analysis, especially in the competitive intelligence in scientific and technological area.

The Need of Strategic Human Resource Management for the Development of Information Technology in Libraries

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Abstract: Human Resource management contributes to mission accomplishment. Integration of human resource management into the library planning process increases HR's ability to anticipate its readers' needs. The management of library human resources is an essential part of how a library is going to attain its targets. The alignment of human resources management implies to integrate decisions about workforce with decision about the outcomes an organization is trying to achieve. Diversity, staffing, retention, personnel development, and workers quality are the key areas to focus. When these areas are well planned and successfully implemented, they lead towards the accomplishment of library's mission with the help of right people with right skills and in the right positions. The main objectives of the research was to appraise the prevailing status of Human Resource Management in Pakistan's libraries, its effects on the process of strategic management, Development of IT projects and library services. To persue these objectives, the researcher deployed the case study method. Only those Libraries were included in the sample which were rich in resources, have at least 0.1 million bound volumes, providing access to HEC digital Databases, had at least four professional librarians at the time of data collection. Selected libraries were either going through the strategic planning process or about to start on it. This study was a blend of qualitative and quantitative methods. Self administered questionnaire surveys and semi-structured in-depth interviews were selected for data gathering instruments. The results show a strong relationship between human resource management and development of strategic management in libraries. Staff development, employee motivation, job satisfaction are the areas which are badly neglected.

Keywords: Strategic management, Information technology, Library services, Human resource management

Net Promoter Score - The Best Way to Compare Yourself to…Yourself: Using NPS for Identifying Potential Impact of a Library

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Abstract: In 2015 the National Library of Estonia continued to carry out systematic user surveys based on the Net Promoter Score (NPS). This feedback method is widely used in the business world to measure the loyalty of customers in order to build

lasting relationships. NPS is based on the fact that when people recommend something to an acquaintance, they take a sort of responsibility for the quality of the recommended thing. So people only recommend those companies whose services they definitely consider to be good. The customer is asked: „What is the probability of you recommending the National Library of Estonia to your friend or colleague"? The assessment scale is 1-10 and additionally the customer is asked a simple question: „Why"?

During the whole year 20 surveys were successfully accomplished in the National Library (NL) of Estonia. Three branches of library service were frequently assessed: the user satisfaction of new visitors of the library (every month), enquiries (once in 2 months) and professional training for librarians (quarterly). In addition, two of the e-services were assessed: e-books on demand (EoD) and digital archive for periodicals (Digar).

This was the second year for the NL of Estonia to apply NPS as the user satisfaction assessment method. At QQML 2015 the suitability of NPS for the library performance indicators standard ISO 11620:2014 was discussed in the presentation. One of the findings of the survey was that NPS is indeed a powerful indicator of library performance. Using NPS not only illustrates the statistic figures but it also serves as a marketing tool for the library and gives valuable feedback helping to make better decisions in librarianship.

The purpose of this paper is to study the connections of NPS with the recent standard ISO 16439:2014 "Information and documentation. Methods and procedures for assessing the impact of libraries". The NPS surveys implemented in the NL of Estonia were used as a model example of such processes in order to find out the importance of the user satisfaction surveys for the library impact. Of course, the output is related to the goals and objectives of the library's planning, and the specifics of a national library with its special functions must always be kept in mind.

Keywords: User survey methods, Net Promoter Score, Assessing the impact of libraries, Standards, ISO /TC 46, National Library of Estonia

Never Standing Still: Using Evidence to Improve Visitors' Experiences at State Library of Queensland

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Abstract: State Library of Queensland (SLQ) provides free access to information and services for all Queenslanders, as well as fulfilling the role of primary collector of Queensland's document heritage. With more than one million visitors per year, SLQ staff are dedicated to creating welcoming, safe spaces for everyone. The Visitor Experience team leads the organisation in this goal, working to promote and nurture a positive and engaging experience for all visitors to State Library, regardless whether people visit us in person, via our telephone service, website or social media channels. To do this, we gather, interpret and apply a range of quantitative and qualitative data sets, using evidence to inform decision making in service innovation.

This case study will examine a selection of these data sources to demonstrate how SLQ responds to the evidence to create an agile, continuously improving service. Examples discussed will include data from door and head counts, qualitative comments from the Tell us visitor feedback database, location and subject data from

the Ask us reference interactions database and the slightly whimsical Happiness exit survey. All of these measures combine to paint a comprehensive picture of who our visitors are and what they use our collections and spaces for. By investing in data collection and analysis, SLQ's Visitor Experience team is able to respond in a timely and appropriate manner to the rapidly changing needs and expectations of our visitors.

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New Instruments for Impact Assessment: Study of an Academic Library

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Abstract: This study presents a review of new instruments for the impact assessment of libraries and a case study of the evaluation impact of the Library of the Faculty of Science, University of Porto (FCUP), from the students' point of view. We conducted a mixed methods research, i.e., which includes both qualitative data, to describe characteristics, in particular human actions, and quantitative data, represented by numbers that indicate exact amounts which can be statistically manipulated.

The newsletter «Notícias da Biblioteca» published bimonthly by the FCUP Library includes a section called "The User's Voice" where frequent library users, randomly chosen, can give their opinion.

Applying *International Standard ISO16439: 2014 (E) - Information and documentation - Methods and procedures* for assessing the impact of libraries, we collected, 20 opinion texts from students of different nationalities, published in «Notícias da Biblioteca», from January 2013 to December 2014 and have conducted seven interviews.

Using the principles of Descriptive Statistics, we produced Contingency Tables to determine the relation between certain groups, i.e., to observe the frequency of the dependent variable on another categorical variable. In these Contingency Tables, we present percentages according to the effects of the impact of the library **on** various groups of students and study the relationship between them.

In this study, we also used some statistical data which show the impact of the library within the institution, such as: performance indicators relating to the use of the library - number of visits per capita and number of loans per capita.

The study of impact assessment in libraries provides very useful data for the top-level managers, to develop new projects and maximize the impact and performance of these services in higher education institutions.

Keywords: Academic libraries, Impact assessment, Mixed methods research

The Next Generation of Information Literacy Assessment: The Threshold Achievement Test

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Abstract: The Framework for Information Literacy, adopted in the United States by the Association of College and Research Libraries, ushers in a new era for teaching and assessing information literacy. The Framework is notable for: (1) its description of the development of learners from novices to experts; (2) the interconnections and overlap among the frames that capture the complexity of information literacy; (3) the definition of knowledge practices as well as dispositions that educators can observe and cultivate among learners; and (4) how it stretches us to ensure students develop metacognitive connections and a deeper engagement with information.
The Framework provides a welcome impetus to pursue a new way of testing students' information literacy. Inspired by the Framework, librarians and other educators are developing the Threshold Achievement Test of Information Literacy (TATIL). The new assessment will include both knowledge items and dispositional items so as to access students' cognitive, behavioral, and affective approaches to information literacy.
The new instrument takes advantage of testing advances made possible by modern web browsers. Using structured response formats, the test will get at concepts that are higher order thinking and more cognitively complex than definition and recall. These types of items also increase students' engagement with the test, leading to test results that more fully represent student understanding. The test is composed of four modules that can be administered independently, an approach that enables educators to focus their assessments on the Framework skills and abilities they teach in their classes and programs.
This test is a new tool for librarians and other test administrators who are gathering evidence of learners' progression toward IL expertise. The themes that run throughout the ACRL IL Framework highlighting the importance of community, critical thinking, curiosity, and perseverance have shaped the approach taken by the librarians and other educators who are developing TATIL. Because of the inspiration from the Framework, TATIL will test facets of information literacy that have not been measured before and that will lead to new conversations among librarians and their colleagues throughout higher education about how to develop students' information literacy.
Keywords: Assessment, Information literacy, Academic libraries, Threshold concepts, Framework for information literacy

Open Access Content as a Value-added Service to Academic Library Users

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Abstract: Since new models in searching and retrieving information emerge, academic libraries have faced the need to embrace new information discovery services aiming to avoid the possibility of users' option to bypass their services when they seek scholarly information. Thus, academic libraries discovery services currently tend to provide diverse content formats, such as OPAC records, e-books/journals, or other digital library's items, in conjunction with the inclusion of alternative resources, such as Open Access (OA) content, in information search results. The study focuses on the University of Piraeus Library new services implementation based on users' information needs and demands. More specifically, we present the development of the library's new portal content offering multiple resources for wider dissemination of

research results many of which are based on OA collections and built on open source platforms. In parallel, we discuss the OA strategies of Greek academic libraries and their contribution to value-added services to the academic community and the general public.

Keywords: Access to information, Scholarly information resources, Academic libraries, Open Access, Institutional Repositories, Open source software, Self-archiving

Open Access, Library Subscriptions and Article Processing Charges: Hybrid Journals Models and Issues

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Abstract: Hybrid journals contains articles behind a pay-wall to be subscribed, as well as papers made open access when author pays article processing charge (APC). In such cases, an Institution will end up paying twice and Publishers tend to double-dip. Discussions and pilot models are emerging on pricing options, such as "offset pricing," [where APCs are adjusted or discounted with subscription costs as vouchers or reductions in next year subscriptions, APCs beyond the subscription costs are modestly capped etc] and thus reduce Institutions' cost. This presentation will explain different models available and how can we attain a transparent costing structure, where the scholarly community can feel the fairness in Publishers' pricing mechanisms. Though most of the offset systems are developed through national level or consortium level negotiations, experience of individual institutions, like KAUST that subscribe to large e-journals collections, is important in making right decisions on saving Institutes costs and support openness in scholarly communications.

Open Access Policies and Experiences in Norway, Romania and Moldova

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Abstract: The paper is concerned with Open Access strategies and resources that promote a new paradigm of scientific communication and provide some benefits to science and society. It analyzes the documents that institutionalize Open Access within the University of Bergen, the Transilvania University of Brasov and the Academy of Economic Studies of Moldova. Implementing Open Access within Moldovan-Romanian-Norwegian collaboration will improve dissemination of scientific knowledge in a spirit promoted by international initiatives and declarations. The reality in which we exist imposes increased responsiveness to changes that occur in all spheres of life, particularly in the field of information and communication. Under these circumstances, the role of the library in promoting scientific knowledge through various ways and methods increases enormously. The access to information and information sharing are essential for the successful development of society and

librarians play a crucial role of leaders pleading for the promotion of Open Access to digital scientific information.

Keywords: Open Access, OA archives and repositories, Open Archives Initiative, OA Journals, Open Access Week

Openness in Indian Agricultural Education and Research System: An Analysis of Major Initiatives and Challenges

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Abstract:

Introduction

The Indian Agricultural Education and Research system has been passing through the phase of innovation and development through various novel approaches and projects and collaborations .One aspect that has been gaining attention is openness or open access and sharing of agricultural information. This article explores transformations, some of the major initiatives in open access policies, institutional repositories, strengthening of digital libraries, and open publishing system.

Open Access Initiatives

India has about 70 Open Access Institutional Repositories http://www.opendoar.org established by universities, and Research Institutes. The Indian council of Agricultural research formulated and adopted open access policy in August 2013. All journals from ICAR are now published in open access using open journal platform http://epubs.icar.org.in called the Indian Agricultural Research Journal portal for enhanced visibility and circulation of Indian Agricultural Research and Knowledge.

The portal this year in July 2015 became the member of TEEAL (the Essential Electronic Agricultural of Cornell University, USA to provide the agricultural, animal sciences, fisheries information to the researchers working at places where internet is not accessible 24X7. The portal is also offering support to scholarly societies and universities publishing journals in traditional manner and to convert the same it into open access online publications. It is also providing a platform to host it to university site without any cost involved. Eight society journals have already joined the portal in 2015.

Other interesting initiatives of open access in agricultural information have been through projects. Under National Agricultural Innovative Project (NAIP) a - World Bank Project approved in the year 2006 a sub project CeRA, a Consortium for e-Resources in Agricultural was implemented to make available various research journals both closed and open access published by National and International publishers to all institutes and universities in National Agricultural Research System. Another sub project under NAIP named E-Granth was implemented having 12 member Universities and Institutes under NARES forming a consortia to share their resources through digital repositories. Krishiprabha http://krishikosh.egranth.ac.in is another popular Agricultural Dissertation Repository consisting of doctoral thesis / dissertations submitted to various agricultural universities from 2000-2009. These are made available to all the Institutes and Universities in NARS under Internet protocol authentication. The Indian Institute of Technology, Kanpur has established *OpenAgri* an Open Access Repository for Agricultural Research called Agropedia a sub project of World Bank supported by NAIP again. The repository is being used by some institutes to deposit their journal articles and other publications.

Opportunities and Challenges

If we look at opportunities the Indian Agricultural Research Institutes (IARI) and State Agricultural Universities needs to globally linked with CIARD ring. A database of all copyright policies of India may be developed and integrated with SHERPA/RoMEO that will facilitate to create an open access NARES database that would be made available to the academic community in the world as Asian Journal Online (AsiaJOL). To make agricultural information open and publically accessible to all, an Indian Agropedia is required content reach with reliable information similar to Wikipedia. Keeping pace with changes in policies worldwide the government of India has planned to share its data, it was announced that a portal http://data.gov.in would be established on the lines of United states and UK which now functional. This opportunity and platform can also be utilized by the NARES system to share their data.

Overall Open Access movement in Indian Agricultural Information is encouraging and catching up with global scenario although a number of initiatives, policies etc are still to be made.

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Opportunities for Professional Accomplishment of Students Majoring in "Library and Information Management"

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Abstract: Youth care is defined as the most important national cause to ensure European Development of Bulgaria in the National Youth Strategy 2010-2020 year. The range of issues that affect youth mandates implementation of a comprehensive approach to address them. In connection to this it cannot be advanced without effective coordination with other sectors such as education, employment, competitiveness and others. Today's young people are challenged to deal with many problems of any kind at the same time. Due to the complex economic, social and demographic situation in recent decades the possibility of adequate cooperation and continuity between generations has impaired. A major problem is the lack of an effective mechanism through which young people to be involved in decision-making on important to them matters. Often there are no opportunities for professional development of young people or their work is insufficient measured in financial terms. A problem for young people who wish to be accomplished is not only a shortage of funds but lack of enough information and skills for organization and management. Today's young generation is facing one of the biggest challenges. Since the beginning of the financial and economic crisis levels of youth unemployment reached unprecedented proportions in Europe. Since the recession it can be observed a

significant growth in unemployment among young people in all EU Member States. A comparison of national indicators for young people with indicators of the average level in the EU shows that in terms of unemployment Bulgaria is close to the average European indicators. The scientific report presents the development of the project "Research and analysis of the opportunities for professional accomplishment of students majoring in „Library and Information Management”". The project aims to stimulate interest in the opportunities for real career development and to increase the motivation of students and doctoral students to participate and perform field research and practice. Surveys of students will take place under the guidance of professors from SULSIT and leading professionals in various areas of information and communication activities. A rich scientific material that will be presented in the form of papers, publications, reports, multimedia presentations will be prepared. There will established useful connections between teachers, students and professionals from different institutions. Meanwhile fieldwork will contribute to increasing the interest and motivation of students majoring in "Library and Information Management" to their careers. As a main purpose we appoint the expanding of access to career guidance services related to choice of profession or career development of young people, increasing the level of participation in education with a variety of learning opportunities and work. As a result will be achieved higher motivation of young people for accomplishment, increased sustainable employment, reduction of the time needed to find job and shorter periods of unemployment. With overall activity on the project we expect to achieve increasing of information literacy of students and to assist them in solving the problems related to their professional development.

Keywords: Research, analysis, Professional development, students, Library information management, Strategy, European Development Information Society

Orphan works in the Library and Information Science profession: an international challenge for Europe

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Abstract: Currently, national libraries and other information centres are facing to a new professional challenge in relation to digitisation policies: orphan works. In this sense, it is the European Directive 2012/28/EU on certain permitted uses that may help library and information professionals face with digitisation approaches. Consequently, this paper aims at analysing the Spanish state-of-the-art on orphan works by identifying current university projects in the Library and Information Science field. At the same time, some research questions based on a diligent search as well as on the identification and localisation of copyright holders will be discussed through the paper.

Keywords: orphan works; digitization; copyright holders; national libraries; European Directive 2012/28/EU; diligent search; Library and Information Science; Europe

The "out the box" legal research: in search of new trends

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Abstract:"Out-of-the-box" research strategies are inquiries where the interaction between information professionals and clients demand sharing data as well as applying interdisciplinarity, and whose solutions lie beyond the information available on structured databases. As methods were used literature review and an exploratory study made by data sampling with many specialized professionals, mainly from São Paulo city, the largest services market in Latin America. The data were analyzed according to the points of view found in the literature and to the authors' experience. Traditional and non-traditional information sources were identified, noticing the significant use of traditional sources on as well the use of non-traditional sources to fulfilling the information demands. There is no substitution of traditional by non-traditional ones, they tend to work together producing complementary results. There is also a space that is shared for both of them. Non-traditional sources may evolve to a traditional or more conventional form. A trend to combine or use more than one search strategy was also observed. The risk of lack on source reliability is the greatest problem mentioned, followed by the dispersion of sources associated with the need for organizing information under a minimum research infrastructure, ineffective personal attendance in other institutions, difficulty on accessing the information or the document required, as long as facing recent, complex or very specific research subjects. Regarding trends and demands, preferences converge to handling information under digital format, on public, fast and easy access. The users addiction for research sources like Google and other search engines were observed, what points to weaker results. Consequently, librarians will find out a brand new working area in the field of reliable sources surveying to lead to better results over increasingly more specific and difficult targets demanded by information clients. Innovative information managing and recording become new challenges for the information professionals and researches in general. Content Curation should be applied as expansion of the set of information sources mapping and selection duties, long performed by information professionals, now under virtual environment. The "out of the box" legal research may easily rise from the context of collective intelligence. It should take into account the social capital present within law librarians. This process allows breaking existing Kantian walls and creating new information ways to serve new demands.
Keywords: “Out-of-the-box” research. Legal information. Legal research. Information sources. Information professional.

Phasing Studies and Methods to Build Toward User-Centred Frameworks for Digital Libraries

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Abstract: Frameworks have been developed throughout different areas and contexts of digital library research (Gonçalves et al, 2004; Marchionini et al., 2006). Most relevant to the current study are frameworks which have been formulated to depict phenomena between users’ information seeking processes and interactive digital library tools. Digital library use (by users) has been thoroughly examined in prior studies by applying mixed methods to successively identify emerging factors and

measure their level of influence for building toward more generalized frameworks (Ju & Albertson, 2015). Further, sets of user-centred factors, in a digital library context, have been formulated by qualitatively coding open-ended responses and free-word associations of intended users and by extracting others as documented in the literature (Albertson & Ju, 2015; Ju & Albertson, 2015). Such work has enabled user-centred factors of digital libraries to emerge organically and through support of prior research, not confined to a specific method. Subsequently, quantitative evaluations have then been applied to further assess such emerging factors of users to include level of impact, prioritization, and significant relationships with other interrelated variables throughout further studies. Frameworks, when established, ultimately support future research and development by providing baselines for initial designs of digital library tools and heuristic evaluations. The current study provides a walkthrough of a holistic approach of a user-centred digital library research program, as phased over multiple studies, which has ultimately produced generalizable results of various phenomena occurring in a digital library context. This research, as conducted, has successively contributed to understanding of diverse aspects and factors pertaining to information needs, criteria, interactions, and performances of users. Examples of the overall approach as presented here can be applied by future analyses aiming to explore framework development in other areas of user-centred research.

Keywords: Digital libraries, User-centred design, Frameworks

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PhD: The Loneliness of the Researcher Undone

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Abstract: During the last 40 years there has been a tremendous increase in the production of scientific information. This is a well-known fact to academic librarians out there, that have been seeing the academic journals' titles multiplying, and the academic books becoming extremely numerous, even about the more obscure of fields.

But, academic information is not only presented in journals and books. Another, very important source is PhDs. Those, being grey literature are usually harder to obtain access to, although, the last few years, Internet has made this job much easier.

Although the rules on obtaining a PhD differ significantly between countries and universities, one condition remains constant; the PhD has to be original and offer create new "knowledge". In that sense no one can repeat the subject of an existing PhD, except, supposedly to disprove it. The PhD candidate is solely responsible to verify that his/her work is original, however, and doing so is somewhat challenging, since the list of in-progress PhD dissertations are held be any given individual

University department, without being publicized either on or off line. In the past this was not such an important problem, since PhDs were much scarcer, and also very hard to obtain, and thus replicate.
Today however, it becomes more and more essential to the researcher to be informed and up to date as far as current research goes. This could serve a multitude of purposes. First the researcher does not run the danger of undertaking a task that could possibly be rendered unfit in the future. Second, and far more important, it could serve as a means of bringing fellow researchers together, with common research interests, and create collaborative projects and opportunities.
This presentation will propose ways to implement such an idea, both in national and international level. It will also try to identify all the potential and benefits of such an endeavor.
More specifically, it will suggest an open access platform where the secretariat of every academic institution, could keep a record of every PhD undertaken within the institution. The platform ideally, would be bilingual, using the language of the country of origin and English, so it could be used by the largest possible poll of users. This way, every candidate will be able to see if his/her subject already exists, in which university takes place, the status of it, and the degree of relevance.
Although setting up such a database is fairly simple and straightforward, if could prove to have a great merit in the research community, giving an additional tool for researchers to come in contact with relevant projects in the very early stages of implementation.
Keywords: PhD, Database, Open access, Connectivity, Community

PILISSE Model for Assessment of LIS Education Courses

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Abstract: It is not feasible to consider one standard for quality assessment of library and information science (LIS) education worldwide; in the opinion of this paper, the most important thing is to try to build a foundation for LIS education assessment that will ensure the equivalency of specific core and common curricula in a more satisfactory way. Much existing concepts such as philosophy of information (PI), social epistemology (SE), and library and information science (LIS) can contribute well towards formulating new approaches to assessing LIS education with the goal to identify specific core and common courses that address the core issues identified by the intersection of PI and SE with LIS. The goal of this paper therefore is to develop a new assessment model called PILISSE for the assessment of LIS education courses. In this case instead of accrediting an entire program/ degree or a certificate course, specific core and common curricula that address directly the fundamental ingredients addressed in the relationship between PI, SE, and LIS will be accredited by an international LIS organization. In the first section, the paper will present a theoretical view of PI, SE and LIS, sharing a fundamental viewpoint that: PI is the philosophical field concerned with the critical investigation of the conceptual nature and basic principles of information, including its dynamics, utilization and sciences, and the application of information-theoretic and computational methodologies to philosophical problems. SE provide a framework for the effective investigation of the entire complex of problem of the intellectual processes of society – a study by which

society as a whole seeks a perceptive relation to its total environment, i.e. the production, flow, integration, and consumption of all forms of communicated thought throughout the entire social pattern. Bring together the clarifications introduced in PI and SE, LIS is concerned with documents, their life cycles and the procedures, techniques and devices by which these are implemented, managed and regulated. The second section will analyze the relations between LIS with PI and SE with a goal to establish a model for assessment of LIS education. It is observed that both LIS and SE are interested in the social dynamics of their objects, have a wide scope and an empirical orientation; while LIS applies the fundamental principles and general techniques of PI to solve definite, practical problems and deal with specific, concrete phenomena.

PILISSE Stands for philosophy of information (PI), library and information science (LIS), social epistemology (SE).

Playful Learning in Children's Library: New Technologies for Digital Natives

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Abstract: Emphasizing the necessity of using innovative methods of work in order to preserve the ties between libraries and new generation users, to improve the quality of library services, to encourage children to read, as well as to modernize the learning process, we will present models of use of information technologies in workshops for children and youth within the Children's Department of Belgrade City Library. Presenting the examples of good practice, we will show the models of intelligent implementation of elements of computer games within the educational process and their use for encouraging children's imagination, creativity and learning.

Workshops were organized for primary and secondary school students and realized by the librarians. Various free of charge and easily available computer programmes and tools, in interaction with computer games, became useful pedagogical instruments.

We will describe the methodology of work and the way of realizing workshops in which children and youth write interactive stories, make comics, learn school lessons and other educational contents, using characters and scenes from their favorite computer games and diverse computer programs. We will also present free of charge software for making digital movies, as well as ways of using it in children's libraries.

Teachers, professors, pedagogues, psychologists and librarians will be offered solutions on how to, using information technologies and gamification elements, help students master the school curriculum more easily and extend their knowledge.

Keywords: Playful learning, Library for children and youth, Information technologies, Computer programs, Reading and learning

The Power and Perils of Participant Observation in LIS Research: Reflections on Three South African Studies

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Abstract: The proposed paper will report on three participant observation studies that I have conducted in schools and libraries in my time as an academic at the University of the Western Cape in Cape Town from the late 1990s. My focus is not on their findings, which have been reported on elsewhere, but on their methodologies. Their common thread is my interest in the role of libraries, school and public, in the information literacy education of school learners. South Africa aspires to join the ranks of the global knowledge economies; yet there are huge backlogs in school libraries. Official national audits of school facilities have quantified the dire lack of resources and libraries in our schools. Only the historically advantaged suburban schools have functional libraries, which are funded by the fees they charge to supplement their government allocations, and which certainly contribute to their superior academic performance. Yet, redress of the disparities of apartheid South Africa is claimed to be a central principle of our educational reforms since 1994. Years ago I described educational policy-makers' apparent lack of understanding of the role of school libraries in the transformation of post-apartheid schooling as a "blind spot". In response to recent pressures from civic society activist groups like the NGO Equal Education and the National Council for Library and Information Services, there have been promises to redress the situation; but as yet it is hard to see any serious credible effort to tackle the situation. My purpose in my research over the years has been to provide evidence from the ground to persuade educationists of the need for libraries and the impact of their neglect on the preparedness of our youth for their post-school lives– in higher education and the workplace. Participant observation is rather rare in the LIS research literature and my aim in the QQML paper is to demonstrate its power to dig beneath the surface of a research site– perhaps in comparison with the rather superficial qualitative case studies I come across quite often in postgraduate theses. I also argue that it brings certain risks, practical and ethical. The research method of participant observation can be seen as a continuum with participation and observation as its two poles. The first study to be described in the QQML paper set out to explore how teachers in an under-resourced primary school in Cape Town were coping with the demands of the new resource-based curriculum, introduced in 1997, and with its ubiquitous project work. The second study took place several years later in a public library in a small rural town; it examined its connections to the seven local schools, none with a library. In keeping with the tenets of open-ended qualitative research, the project took a surprising twist in its uncovering of the fraught relationship with its sister library in the township on the other side of town. The third study a few months ago was of a library in a high school in a sprawling township on the edge of Cape Town. The library is part of a project that provides stipends for young unemployed school leavers to act as library assistants. My underlying purpose was to examine the potential of this approach as a solution to the human resources challenges that clearly will confront any future effort to build a school library system across the country.
Keywords: Research methodologies, School libraries, Public libraries, South Africa, Participant observation

Private Book Collections within the Framework of Public Libraries - Decision Making According to Quality and Quantity

Nada Arbutina

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Abstract: Book collection arisen as a private library when is given to the public library gets the opportunity to have its public presentation on the benefit to one who has done that gift and to library users as well as to the future generations.
Quality of the private collection decides if the public library should accept a gift, but on that decision also affects the quantity of the collection. It is essential to know how to correctly set relation between big or small and significant or worthless collections - not always the bigger number of books means that the private library is significant in the cultural point of view. Experienced librarians know how to correctly assess each situation individually.
Sometimes valuable gift is dusty, neglected and almost always in a very bad condition. Therefore it is very important to understand the relationship of quality and quantity regarding someone's collection. It is not rare situation that some private book collection is methodically and systematically arranged, often with precisely divided continents, with separated manuscripts, photographs, reference books, etc. but the same collection is one with hidden superficiality in selection of titles, affected by current fashion or what is the saddest with books which were just a decor in shelves of someones rich home.
Librarians must have the knowledge to assess objectively and professionally, if library needs certain collection, if it is in accordance with its business activity, if the quality and quantity of the private book collection can be maintained in library and especially if it can be on service and the benefit of researchers and readers.
Keywords: Private book collections, Public libraries, Legacy, Researchers

Project BLIIPS: Making the Physical Public Library more Intelligent through Artificial Intelligence

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Abstract: The number of book loans in Dutch public libraries is decreasing, whereas the size of the (book) collections is relatively stable. This calls for new business models of the public library in the modern, digital age, where information is omnipresent and the library is not the sole source of knowledge anymore. Public libraries in the Netherlands have been very active with the concept of "the library of the future"; many have changed the library towards what the general public might call a book store, with displays, recommendations and lots of visible book covers. To further bring the library to the digital age, one prominent idea is to *blend physical and digital possibilities* to have the best of both worlds. In line with the theme of QQML2016, we explore the challenge of building the future (public) library, and in particular with bringing artificial intelligence and data analytics to the physical library. This paper is about a novel, ongoing "data science" project on bridging the physical and the digital world in the context of the public library. Project BLIIPS, which stands for "Books and Libraries: Intelligence and Interaction through Puzzle- and Skinnerboxes", deals with interactively, and adaptively, optimizing customer journeys using data. The project is being carried out in an actual Dutch library consortium, in a cooperation with Stichting Leenrecht, VU university and local partners. The main idea of the project is to add sensors and artificial intelligent algorithms to the physical library such that activities of users can be tracked and used for analytics purposes. Activity-based presentation of books, the use of loan information, and navigation

assistance through the library are among the goals of the project. The long-term goals of the project are the creation of a "library lab" for data analytics for the public library and the development of new business models for the public library. At a more general level, we are interested in how the "libraryness" (van Otterlo, 2015) of concepts that are associated with the physical world can be translated to a hybrid physical-digital space in which we can have (some of) the benefits of digital worlds in our familiar physical surroundings. By doing so, we also raise questions on what libraries are in the digital age, how strong the relation is with the actual, physical space of the building and its books, and further what the relation is between the meaning and function of the library and its place on the physical-digital continuum. In the paper we also present results from the project.

Keywords: Digitalization, Artificial intelligence, Library use, Data analytics, Smart sensors, Libraryness, Physical-digital Continuum, Public library

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Publidoc-UCM Research Group: Scientific Dissemination and Communication

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Abstract: There is no doubt that libraries, especially university libraries, throughout their history have always provided support to the field of research, by giving assistance to researchers.

It is also known that library policies should provide for cooperation in order to strengthen and, in the main, improve the services provided to the community. However, we can speak of a lack of cooperation between universities and non-academic information and documentation centers.

According to this framework, this paper will present Publidoc-UCM Research Group, institutionally tied to the Faculty of Information Science of the Complutense University of Madrid; it will make known its vision, research areas, recent publications, scientific and technical activities and current projects. Ultimately, the aim is to promote and open up the horizon to such collaborations, something which, on the one hand, will help information and documentation centers carry out new challenges and, on the other hand, will turn into an improvement of service quality and user satisfaction.

Keywords: Library and Information Science; libraries; library cooperation; researchs groups; collaborative projects

Public Library as a Center of Non-formal Education - The Quality of Programs and Library Services / Information and Knowledge Management

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Abstract: The objective of the paper is to recognize the place, the role and the importance of the public library in the citizens' non-formal education and learning process, as well as to create an integrating environment that asserts education and lifelong learning, with the help of professional librarians. The role of the library in this process: to surpass the achievements of formal education, by bringing together all the relevant institutions, individuals and groups in the learning process; to connect the elements of formal and informal education, thus creating an "educational system for everyone" accessible to a wide population of users of all generations, so that every person can identify with this practice and recognize core values, while taking part in lifelong education and learning. Public libraries are accessible and enjoyable civil places. That's why classrooms and traditional textbooks need to be replaced by libraries – institutions that offer a wide range of different media and professional guidance in techniques of information search.
Keywords: Lifelong learning process, Knowledge-based economy, Social equality and social inclusion, Multicultural society, Informal learning, Learning society, Economic competitiveness, Globalization

Publidoc-UCM Research Group: Partnership between Universities and Information and Documentation Centers

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Abstract: There is no doubt that libraries, especially university libraries, throughout their history have always provided support to the field of research, by giving assistance to researchers.
It is also known that library policies should provide for cooperation in order to strengthen and, in the main, improve the services provided to the community. However, we can speak of a lack of cooperation between universities and non-academic information and documentation centers.
According to this framework, this paper will present Publidoc-UCM Research Group, institutionally tied to the Faculty of Information Science of the Complutense University of Madrid; it will make known its vision, research areas, recent publications, scientific and technical activities and current projects. Ultimately, the aim is to promote and open up the horizon to such collaborations, something which, on the one hand, will help information and documentation centers carry out new challenges and, on the other hand, will turn into an improvement of service quality and user satisfaction.
Keywords: Library and Information Science, Libraries, Library cooperation, Research groups, Collaborative projects

PYXIDA: The Institutional Repository of the Athens University of Economics and Business (AUEB)

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Abstract: The present paper serves as a case study which demonstrates the project of implementation of the Institutional Repository by the AUEBB's Library. The project was co-funded by the EU and the Greek government in the framework of a broader program of digitization. The paper describes the main stages of the creation and implementation of the repository including the adoption of a digital repository system, the digitization of selected printed items, the documentation of the digitized material and the definition of deposition policies.
The ultimate purpose of this article is to highlight the crucial factors for the successful implementation of the repository so as to serve as an added value for the University.
Keywords: PYXIDA, Academic repository, Copyright, Digital collections, Digital repositories, Digitization projects, MOPSEUS digital repository system

Quality Measurement in Irish Academic Libraries: Maynooth University Case Study

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Abstract: Formal quality assurance procedures for Irish university libraries were implemented under the 1997 Irish Universities Act. There are three main elements to the quality review process; the preparation of an internal self assessment report, a peer review visit and report, and the development and implementation of a Quality Improvement Plan (QIP). Essentially the review offers an opportunity to reflect on library activities in a structured manner and to receive feedback and guidance for going forward. Maynooth University (MU) Library in Ireland had its third quality review in 2015. In this presentation, the three aspects of the quality review process are explored from the perspectives of both the reviewer and the reviewee.
While the presentation will focus on the Irish context, the model has relevance and applicability for libraries internationally.

Quantitative and Qualitative Instruments for Knowledge Management Readiness Assessment in Universities

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Abstract: Knowledge Management (KM) is the process of capturing, creating, disseminating and applying all forms of knowledge within an organization in order to fulfil one or more organizational objectives. However, universities have been slow to adopt Knowledge Management. Agarwal & Marouf (2014) came up with a 10-step process and a framework for initiating KM in universities. The steps were organized within 4 phases of plan, design, implement and scale-up. After getting top management support, forming a KM team, and identifying KM goals and priorities, the third step of their process (within the design phase) was determining the extent to which the university is ready for KM i.e. an assessment of its current state of readiness. Agarwal & Marouf propose that readiness assessment can be achieved

through a survey, interview or focus groups to determine the KM capabilities relating to people, culture, processes and technology within the university. While there are a number of readiness assessment instruments, it is not clear how such instruments would look like in the context of universities and when surveying faculty members. What would be the quantitative and qualitative way of gathering KM readiness data in universities? In this study, we will design and propose a research model, a survey instrument, and an interview protocol for KM readiness assessment in universities. Readiness assessment could mean individual faculty readiness as well as organizational readiness. While the survey instrument will focus on individual faculty readiness, the interview protocol will focus on organizational factors. Where possible, survey items will be adapted from previous studies, and new ones developed where needed. The survey instrument and interview protocol could be used by other researchers to carry out mixed-method studies to assess individual KM readiness in universities. Future work will involve coming up with a survey instrument for organizational factors, and an interview protocol for individual factors, and then combining instruments for both sets of factors.

Keywords: Knowledge management, Readiness assessment, Universities, Survey, Interview, Faculty

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Reader Account Statuses as Indicators for Projecting Print Resource Usage in Academic Libraries

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Abstract: A statistical analysis was made of the statuses of reader accounts at eight university and college libraries in Poznan, Poland. The following indicators were analysed: the ratio of accounts with borrowed items to the number with no borrowed items; the mean, median, modal and maximum numbers of borrowed items; the standard deviation; and the percentage of borrowed items accounted for by the most active 20% of registered readers (verification of the 80/20 rule). The study was carried out for accounts belonging to academic and teaching staff and for accounts of students in selected faculties. The results were interpreted with regard to the forecasting of the degree of usage of print resources in academic libraries.

Realizing the Vision: Transforming Library Space to Knowledge Commons

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Abstract: Stony Brook University Libraries is the largest research library in Long Island, located about 60 miles from New York City. Stony Brook University (SBU) is the home to many highly ranked graduate research programs. The University's 1,100-acre campus is home to 24,000 undergraduate, graduate, and doctoral students and more than 13,500 faculty and staff. The mail library facility on campus, Melville Library, was designated for a major library renovation project. The Melville library is one of the original buildings on campus. It is in great need for upgrades in

infrastructure and technology. The presentation, *Realizing the Vision: Transforming Library Space to Knowledge Commons* describes the library's renovation project that aims to transform major areas of the public library spaces. The presentation explores the SBU Library's guiding principle in "Developing Responsive Library Spaces for Diverse User Communities" and outlines the steps for planning and designing the renovation project. The Library articulates the guiding principle of "Developing Responsive Library Spaces for Diverse User Communities" by designing library space to increase productivity and develop communities of learning. We benefit curricular and research initiatives with library facilities, technologies and services and we design flexible/multi-purpose spaces in a high technology environment. The "Knowledge Commons" renovation project incorporates new technology improvements, new furniture and space management that transform the library into a more engaging, interactive and welcoming place. The presentation describes the work of several groups on campus such as focused teams from the SBU Libraries staff and librarians, student groups, the facilities and academic planning teams, during the planning process for developing a functional open space areas, to address technology needs and to identify innovative furniture concepts that are appropriate for today's technology needs in the SBU Library.

Reimagining academic library user experience: Using mystery shopping to inform service decisionmaking at the Czech National Library of Technology

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Objectives: This paper describes how the Czech National Library of Technology (NTK) performed mystery shopping (MS), a technique borrowed from the commerical services sector, as a tool for informing its service decisions and offerings, both virtual and in-person. The methodologies used for two rounds of MS, one in 2014 and another in 2015, are described, and findings and interpretation of feedback in relation to actual NTK service modifications are presented.
Setting: NTK is a large academic library in the heart of Prague's science and technology campus.
Methods: MS assessments at NTK have been performed twice, in 2014 and 2015. The first project, conducted by an employee within the framework of her Master's thesis, included 10 mystery shoppers who investigated 10 areas of activity and 38 specific questions. The second round, based on the first with several modifications and managed by a three-person team, involved twenty volunteer shoppers who tested twenty-two service points, both virtual and in-person, in four areas of activity using 122 specific questions.
Questions were developed according to a process of creating so-called "personas" and "customer journey mapping" and selected depending on the key strategic areas of research interest. The first and second rounds were not entirely identical in terms of questions. The first round was focused primarily on the outer and inner environment of the library. The second round primarily assessed user-friendliness of systems and desk services.

Main Results: Findings from both assessments were generally positive and indicated roughly the same strong and weak areas. Key areas for service improvement in the 2014 round included service staff training (in expertise and social skills), signage in the library space, unreliable WiFi connection and PC terminals. As a result, NTK created a leaflet guide to library and enabled customers to borrow cables for wire network connection. Terminals and other PC equipment was upgraded. In 2015, issues identified included a hectic reservation process and insufficient promotional information about library services, a nonintuitive and confusing online catalog, and unfriendliness of some IT services (WiFi, reservation system, system for printing and scanning). As a result, NTK will reimagine and develop its system of desk and reference services, strengthen its system of continual staff training, perform a special user survey focused only on the catalog, and redesign several IT systems.
Conclusion: MS enabled the library to identify main problem areas of user experience and brought a surprising recommendations. Unambiguously positive impactsc were that survey confirmed the strengths of the library and encouraged us to make changes little different and more boldly. Following the first round of assessment, we focused on the creation of a motivating learning environment and easier orientation within the library building. Results from the second assessment indicate the need to deeply examine some services, to better promote them, and to improve the competencies of service staff. We plan to conduct another round of MS in 2016 in order to examine whether or not issues and solutions identified in the previous rounds have been appropriately resolved. This paper contributes experiences from the Czech Republic to the already-existing set of literature regarding MS academic library implementations in the US and several other European countries.
Keywords: service design, service management, innovation management, customer relationship management, qualitative research methods, assessment of library services, survey, mystery shopping, research libraries, reference services

The Relationship between the Information Literacy and How to Use it among Staff and Faculty Members of Islamic Azad University, North Khorasan

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Abstract: Azad universities in North Khorasan and how to use it to improve the performance of the organization.
Method: The study is a descriptive and correlational study and conducted through a survey. The statistical population consists of all the staff and faculty of Islamic Azad universities in North Khorasan cities including Ghouchan, Bojnoord, Shirvan, and Esfaraen. 371 subjects were selected by cluster sampling, 218 employees and 153 professors. The variables examined in this study are data analysis, information searching, information organizing, data interpretation, and application and evaluation of information. The collected data were analyzed using version 21 spss.
Findings: The study population included 80% males and 20% females. Also the highest rates of sample dispersion observed at ages 30 to 40 (8/52%) and 40 to 50

(27.8%). There were no significant relationships between age, gender, and education and information usage. Literacy level of the faculty and staff is at the intermediate level and the extent of their knowledge of Microsoft Office and PDF software is located at a high level.
Keywords: Information literacy, Performance improvement, Staff, Information needs

Research Regarding Access to Digital Databases

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Abstract: This paper describes the initial research conducted to deploy a digital database to support public institutions that host archives. At present, this experimental test bed, *The Digital Document Management System*, is an effort to collect and archive documents of public interest. We envision this effort to facilitate a fast and efficient access to public archives, using the software which will be developed on the basis of this research. The research is focused both on workers in the public archives sector and civilians who need to access public documents.
Keywords: Public archives, Computer-aided engineering, Engineering knowledge-bases, Product data management, Statistic research

Research Status and Trends of Library and Information Science in ProQuest, 2003B–2012

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Abstract: Purpose: This study mainly focuses on visualizing the structure of the scientific publications of LIS researchers and current status of subject trends in the dissertations in the field of library and information science indexed in ProQuest database during 2003 to 2012.
Methodology: This study is a descriptive approach using scientometric and content analysis methods. In order to fulfill the aim of the study, 1612 dissertations and thesis extracted from the ProQuest database during 2003 to 2012. Information Science and Technology Abstract (ISTA) databases were used for the ranking, visualizing and content analysis of dissertation topics. Data for this study were collected by a checklist for each of 10 main categories of dissertation subjects.
Findings: The results show LIS and Information Retrieval to be the most popular topics in the dissertations and theses. Also the results show a research trend focusing on Bibliometrics, Information Technology, Information Management, Electronic Publishing, Scientific Communications, Printed and Electronic resources, Cataloging and Classification. The results show that the highly interdisciplinary nature of LIS is affected by the incessant evolution of information technology and management.
Originality: This study is important for LIS researchers, LIS academic program professionals, teachers and students to remain updated about main subjects of research in top leading LIS dissertations.
Keywords: Research status, subject trends, library and information science, ProQuest dissertations.

Research Trends in Banaras Hindu University: Quantitative Analysis of Doctoral Dissertations and Research publications

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Abstract: Banaras Hindu University completed 100 years of its glorious past and its contribution to the society by teaching, research and publications. BHU was established by Pt. Madan Mohan Malaviya on 4th Feb. 1916 before independence of India. Banaras Hindu University ranks among the first few in the country in the field of academic and research output.

This university has two campuses, 6 institutes, 16 faculties, 140 departments, 4 advanced centers and 4 interdisciplinary schools. The University is making its mark at the national and international levels in a number of frontier areas of Science, Social Science, Technology, Medicine and Agriculture etc. BHU has above 30,000 students and above 5000 research scholars in all disciplines. BHU is having collaboration with various international institutes and universities of the world. Students from 65 countries enrolled under various courses of the university.

There are thousands of publications of faculty members and researchers of BHU as covered by Web of Science and Scopus. We analyzed these publications in the present paper. On the basis it one can know the strength of research output of Banaras Hindu University.

Research Publications in Web of Science

BHU faculty members and researchers published their research papers in international journals of high impact factor. As per Web of Science database, there are 16,000+ publications of Banaras Hindu University during 1980-2015.

The Banaras Hindu University's publications have achieved significant citation impact across all disciplines. The cited rate varies from the maximum of 84.78% in the Chemical Sciences followed by 81.57% in Agricultural Sciences to the minimum of 10.53% in Arts and Humanities (Inflibnet report, June 2014).

Research Publications in Scopus Database

As per Scopus database there are above 20,096 publications of Banaras Hindu University in all subject areas. Out of them contribution in the field of Medicine (22.2%), Physics and Astronomy (19.1%), Biochemistry & Genetics (18.1%), Chemistry (18.0%), Material Science (15.9%), Engineering (13.5%), Agricultural Sciences (13.5%), Pharmacology (8.8%), Chemical Engineering (7.7%), Environmental Science (7.0%) and rest in other subject areas. In this way, we can say that BHU have great impact on global research.

Doctoral Dissertations: Above 12800 doctoral dissertations awarded from BHU in all fields of knowledge and subject areas.

The scientist and faculty members published their research findings in international and national journals and conducting regularly extension activities for translational research to community. In this way BHU is serving the society and fulfilling the dreams of Bharat Ratna Mahamana Pt. Madan Mohan Malaviya, the great founder of Banaras Hindu University.

Research Productivity of Select Indian Universities: A Quantitative Survey

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Abstract: In the present study, an attempt has been made to assess the performance of Indian universities based on their h index taken from the SCOPUS database that is the largest database of abstract and citation of peer reviewed literature including scientific journals, books and conference proceedings containing 50 million core records going back to 1995, two million pre 1996 and 5.5 million conference papers from proceedings and journals. The h-index is an indicator of excellence in research publications by scholars or scientists that measures the number of publications and citation in other publications.

The main objectives of the study are to measure the growth of publications of top three Indian Universities, to find out rank of Indian universities and to compare their performance in terms of their output of publications and h-index. For this study, investigators collected data of top three Indian universities from SCOPUS database from 2010-2015 and analyzed the difference of number of documents, their citations and h-Index.

The study revealed that during the year 2015, Panjab University produced a higher number of research publications (10837) while comparing with the research output of the Aligarh Muslim University (10773) however the Jawaharlal Nehru University has contributed 7446 research publications during the same year. It has also been revealed from the study that the Punjab University ranks number one in India while comparing the h-index of Indian universities in the year 2015. The present h-index of the Punjab University is 116 that is ahead of the Aligarh Muslim University having 87 and the Jawaharlal Nehru University with 79. In the end, the study has stressed on qualitative research publications that ultimately will help in achieving higher ranking as citations and h index depends upon the quality of research work/ papers.

Keywords: Research Productivity, SCOPUS, Research Databases, h-Index, Indian Universities

Revealing the Existing Value: Marketing for Archives

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Abstract: From the past until today there has been the dilemma of: 'What is the primary duty of the archivist? Is it to protect archival material or to promote its usage?' However, today the primary aim of protecting archival material has held sway, human-oriented thoughts have influenced archival practices and the question of 'Why do we need to protect unused knowledge?' is now being discussed. At this point, the necessity for implementing different processes and methods - for example, marketing – has emerged to promote the usage of archives, one of the leading services from organizations that provide knowledge. Marketing can be defined as a process of coordinating four elements: product/service, price, place and promotion. This process includes identifying, selecting and developing a product and/or service, determining its price, the place where it will reach the customer and developing and implementing a promoting plan.

This study discusses marketing within the context of archives and archival material. The 4P's of marketing are analyzed in terms of archives and archival material. The subject is supported by a literature analysis and an analysis of some marketing processes used in different kinds of archives around the world. An outreach program for an archives-targeted market and a model that presents a marketing process for archives and archival material will be presented at the end of the study.
Keywords: Archives, Archival material, Marketing

The Role of Effective Communication in Increasing the Efficiency of Academic Libraries in Tehran

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Abstract: The purpose of this research is to determine the role of effective communication in increasing the efficiency of the academic libraries in Tehran. The survey-analysis method was used. The research population consists of 260 librarians in the central libraries of the universities which are located in Tehran. The data was collected via questionnaire and analyzed using SPSS software. Utilizable methods including in descriptive methods (frequency and descriptive tables and pie charts and bar plots and histogram) and inferential statistics methods (Pearson correlation analysis test, Spearman correlation analysis test, Chi-square test of independence) were applied.

The Role of Institutional Competencies for the Long Term Preservation of Electronic Records: The Experience of the Turkish Public Sector

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Abstract: A growing number of e-governance applications have been developed since the beginning of the millennium to be used in public services in Turkey. It is also apparent that most government department now create, use and maintain records in electronic form. This is partly due to standards which were developed in 2007 for managing electronic records; these were made mandatory for government departments in a circular issued by the Prime Minister's Office in 2008. Up until today, the focus of the standard has been on the system criteria for managing these records. The Turkish Standards Institute has been given the mandate to test the software to be used in government departments in order to ensure record authenticity and admissibility, as well as being informed about the system criteria for accountability, sustainability and security. The 2015 version of the standards for managing electronic records and archives widened the scope of the standard, making it appropriate for testing the institutional competencies of government departments.
This paper aims to address the issues on how institutional competencies can have a profound effect on the continuity of electronic records. First, it sets the scene for the digital outlook of the Turkish Public sector, and, by drawing from the experience of the previous version of the standard, establishes the foundations for the new version

of the standard; subsequently the test criteria for system requirements and institutional competencies will be examined. The transformation of government departments that enables them to cope with the challenges posed by electronic records and processing work in the electronic environment has also been undulant. This paper also tries to address issues on and suggest a management model for a smoother transition to electronic environment.

Keywords: Electronic records, Long term preservation, Turkish Public Sector

Role of Libraries in Preservation of Traditional Knowledge: With Special Reference to India

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Abstract: Traditional knowledge comprises the knowledge, innovations and practices of indigenous and local communities around the world, developed from experiences gained over centuries and adapted to the local culture and environment, which is transmitted orally from generation to generation. It tends to be collectively owned and takes the form of stories, songs, folklore, proverbs etc. Traditional knowledge is an integral part of the culture and it plays a very important role in building the nation more progressive and transforming its society. India is a multi-cultural, multi-lingual country having nature friendly rich traditional knowledge. These have been shaped and nurtured by many tribal and non-tribal social formations inhabiting different parts of the country.Traditional knowledge can easily lose so it is wise to make efforts to preserve it. Traditionally, libraries, information centers and archives are guardian of knowledge and cultural legacy.

The article discusses the concept of traditional knowledge, its importance, role of libraries and information centers in preservation of traditional knowledge in India. Libraries and Information centers are performing various activities to preserve traditional knowledge e.g. documentation of traditional knowledge, capturing/recording of traditional knowledge, microfilming of traditional knowledge, digitization of traditional knowledge and creating digital repositories to enhance the accessibility of traditional knowledge.

In India, various libraries and information centers are engaged in preservation of traditional knowledge e.g. National Manuscript Mission (NMM), Traditional Knowledge Digital Library (TKDL), and National Digital Library of India (NDLI) etc. Some challenges are also being faced by above organizations e.g. lack of recording of traditional knowledge, copyright issues, cost of digitization and lack of trained manpower.

Keywords: Traditional knowledge, Indigenous knowledge, Digitization, Digital repositories, Preservation of manuscript

The Role of the Library in Design Learning: Support for Digital Scholarship, Enhanced Discovery, and Visualization Activities

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Abstract: Many institutions of higher education are investigating mechanisms to better support e-research and design learning programs. Design thinking has been

adapted in a wide variety of academic disciplines on campuses and is regarded as a means to enhance the residential experience of students. To accommodate this focus on design learning and E-research, libraries have designed and deployed a variety of physical spaces, often termed "digital scholarship centers:, "scholarly commons", or "research commons" that provide high-end technologies and support services for faculty, graduate students, and undergraduate students, including students working on capstone projects.

Bryan Sinclair of Georgia State University has noted: "By leveraging technology, the Library can provide innovative spaces and services to foster collaboration, innovation, and entrepreneurship. Through these new collaborations, we can create exciting shared spaces, both virtual and physical, where that inquiry can take place. The library is a natural home for these technologies." Several academic libraries in the U.S. serve as exemplars for these digital scholarship spaces and services. This includes: North Carolina State University Library, the Duderstadt Center at the University of Michigan, Brown University Library, the University of Indiana, and the University of Illinois at Urbana-Champaign.

The Grainger Engineering Library Information Center at the University of Illinois has recently remodeled some 10,000 square feet of space to create the Grainger Engineering Library IDEA (Innovation, Discovery, Design, and Data) Laboratory. This presentation will focus on the role of the IDEA Lab in providing spaces and services for faculty/student collaboration, innovation, and entrepreneurship. The IDEA Lab functions as a demonstration and prototype site for exploring the interface between design learning, informatics, visualization, and data analytics. There is a strong emphasis on visualization activities in the Lab. We expect that the IDEA Lab will serve as a node in a multi-facility campus design learning network and will complement services offered in a new University of Illinois Design Center, scheduled to open in 2018.

The IDEA Lab will leverage and expand on the Library's rich history of pioneering innovations in information discovery and delivery. We are particularly interested in the role that collaborative or team information discovery can play in design learning. To this end, we are designing and testing a high-definition multi-monitor distributed Easy Search discovery system with various information target result displays appearing on separate monitors or in separate areas on a visualization wall. This will be the ultimate Bento-type information resource discovery and delivery system.

The IDEA Lab staff are initially working with three Illinois College of Engineering groups: the Technology Entrepreneur Center (http://tec.illinois.edu/) Fellows and students (including the iVenture Accelerator (http://iventure.illinois.edu/) groups); students and faculty in a Mechanical Science and Engineering capstone senior design classes; and several Department of Computer Science visualization and design faculty and courses.

The key IDEA Lab technology components are:

Two informatics laboratories with a total of 10 movable large screen monitors with attached workstations for work on information discovery and database technologies (such as the distributed Bento system);

Eight student collaborative work rooms with removable walls, wall-attached whiteboards, several movable high definition monitors on carts, and movable whiteboards;

Seven collaboration tables with attached monitors for group viewing of work;

Two presentation areas with 84" monitors (one area with twin 84" monitors) for student/faculty presentations;

Three 3D printers and a 3D scanner; and
A high resolution visualization wall that is 13.5 feet by 7.5 feet comprised of a 4x4 array of 46" monitors for presentations and interactive displays.
This presentation will describe the key facilities and services offered in the Illinois IDEA Lab and in other digital scholarship centers headquartered in academic libraries. The assessment and evaluation program will be discussed and opportunities for the portability and scalability of library-based applications across multiple digital scholarship centers will be discussed.

The Role of the Library as a Vigilante Group in African Communities

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Abstract: Kidnapping has become an almost daily occurrence in Edo State, Nigeria and in other parts of Africa. This form of criminality is not limited to Edo state but spreads across the entire continent. From the activities of Boko Haram in West Africa particularly Nigeria, AL-Shabab in East Africa, Al-Qaida in North Africa, and gangs in Southern Africa, the continent is facing unprecedented challenges with the protection of her human capital. Kidnapping is the result of unemployment, corruption, societal disorientation and none existent or decaying infrastructure. This is where the civic and social responsibility of the library as vigilante takes center stage. Social responsibility is a part of librarianship. The issue of empowering African communities with information on positive engagement and personal job creation is a core value of librarianship. Since no meaningful development can occur with kidnapping, responsible librarianship empowers African communities through dissemination of information that can contribute to job creation and reorientation with basic African cultural values of life by reorienting Africans especially the youths to understand their roles.
Traditionally, the LibraryB's role is to house and provide users with access to relevant information resources. However, for about 50 years now, libraries worldwide have progressively developed into information banks and provider of information services even without walls. The aim of this is to give high value to the needs and expectations that empower users. In this role, the library is a vigilante institution that generates and shares information by helping users to locate, filter, organize and access it freely through formal and non-formal means of information sharing in various communities. This access role as vigilante differentiates libraries from all other institutions. In this vein libraries are in a revolutionary phase faced with revolving challenges like kidnapping.
The paper shall highlight services/products/ and approaches which libraries in Africa can implement to empower African communities to tackle kidnapping using the vigilante model among the Edo people in Nigeria. This study shall use a combination of on site visit to some vigilante groups in Edo state, Nigeria band literature review of available evidence of personal experiences of some authors.

The Role of Making the Interior and Furniture Sorting Pleasant on Attracting the Users of Central Libraries of the Statement of State Universities of Tehran

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Abstract:
Purpose: This study aimed the role of making the interior and furniture sorting pleasant on attracting the users of central libraries of the state universities of Tehran.
Methodology: The present study is navigational from the perspective of description method and it is from the kind of practical. For gathering data, a questionnaire was used and the questionnaire admissibility has determined using the content admissibility and to determine its reliability, Cronbach's alpha coefficient is equal to 93.0.Questionnaire distributed among the 326 members who were selected by simple random sampling and were analyzed using spss software.
Findings: The attention about the design and arrangement of the tables were (46%),the design and arrangement of the seating were(38%), coordination and the psychological role of light and brightness was (45%), harmony and psychological role of the colors was (35%), designing of the interior area and the furniture arrangement was (36%) ,these libraries modestly (39.32%) have a pleasant impact on user's mind ,the library designing satisfy them a little (73.71%). the library of Shahid Rajai University had the greatest impact attraction of the users and the library of Allameh Tabatabai University satisfied the users more than the others in terms of space designing.
Conclusion: with considering the amount of users satisfaction (7/28%) in order to their attraction to the library environment and their satisfaction amount of (4/28%)about interior designing of the library should be taken to improve conditions to attract and take more satisfaction.

Scientific Production of the Portuguese and Spanish Universities: A Comparative Analysis

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Abstract: Increasingly higher education institutions play a key role in research and scientific production. In every country and region the productionB's thematic orientation of universities presents particular characteristics. The need of identify outstanding institutions had as consequence a variety of papers that compare the main thematic orientation of universities in an international level (Bordons et al., 2010; Souza et al. 2015).
This study analyses the scientific production of universities in Portugal and Spain by subject area in the period between 2005 and 2014. We used the Web of Science (WoS) from which we identified their subject area specialization.
The objective is to know and compare the contribution of universities in each of these countries and identify their thematic specialization profiles through the usage of bibliometric and statistical indicators. The analysis will present tendencies of the scientific production comparing and relating the situation of Portugal and Spain.
The results show that 66% of the Spanish scientific output corresponds to the production of higher education institutions, while the Portuguese values of this type of institutions reach 84% of the total.

We identified the main research areas and conclude that the subject areas with more production indexed in WoS are Engineering, Chemistry, Physics and Computer Science in both countries.
These results give valuable information to recommend strategies for the cooperation between universities of both Iberian countries in order to increase their visibility and impact worldwide.
Keywords: Scientific production, Higher education institutions, Web of Science, Portugal, Spain

Scientific Productivity of the Federal University of Rio de Janeiro, Brazil

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Abstract: Scientometrics research related to the scientific production of the Federal University of Rio de Janeiro has been proposed with method of quantification of post graduate programs. These studies enable the production of scientometrics indicators and can show the productivity of researches, considered crucial to establishment of national and international scientific policy. The theoretical framework used was the Scientometrics researches about scientific popularity and productivity (Marshakova, 1981) using citation analysis in Information Science (Leta, 2011; Garfield, 1979; Tague-Sutcliffe, 1992; Meadows, 1999 etc). In Tague-Sutcliffe (1992, p.1) the Scientometrics is the study of quantitative aspects of science as a discipline or economic activity. Marshakova (1981), states that the productivity of research can serve as a measure of its scientific efficiency in a given area of knowledge. The central objective is to appreciate the scientific production of researches of UFRJ, linked to programs of graduate school strict sense, in the period of 2009 - 2014. The specific objective are: i) classify the productivity according with the different unit of post graduate programmes; ii) quantify the productivity of orientation of the dissertation of master's degree and doctoral theses; iii) identify the fifty more productive researchers, pointing the program, institution, college or school and center where they work. The research is characterized as qualitative and quantitative study, was used the database of Lattes curriculum of National Council of Scientific Development and Technology (CNPq), Brazil, with the data about the researches of UFRJ, in the period of 2009 – 2014. The methodology consisted of the following steps: i) identification of each programs of graduate school, of the Institutions, College or School and Centers of the University; ii) collection, selection and quantification of productivity dissertations guidelines submitted to Programs of graduate school; iii) elaboration of statistic distribution of the data, according with the productivity. The results point out the researches scientific productivity linked to Federal University of Rio the Janeiro, no period de 2009-2014, and confirmed the importance of scientometrics studies for the postgraduate evaluation of the UFRJ and to the process of identifying of the scientific productivity in the knowledge areas and postgraduate programs. The UFRJ integrates six academic centers: Center for Science and Health (CCS), Center of Legal and Economic Sciences (CCJE), Center of Mathematical Sciences and Nature (CCMN), Center of Philosophy and Human Sciences (CFCH), Center of Language and Literature and Arts (CLA) and Center of Technology (CT); and also the Science and Culture Forum. Each center consists of

institutes, colleges and schools account for a total of 42 units. These units offer 102 master's courses linked to the post graduate programs. In the period 2009-2014 were guided by the researchers, 8,475 dissertations. The average of guidance for programs was 83.1. It was found that 17 (16.6%) programs were above the average and 85 (83.4%), below. The 8,475 master's dissertations were guided by 1,937 teachers. The teacher with the highest number of guidance (53) in the period analyzed is linked to the Civil Engineering Program at the Alberto Luiz Coimbra Institute for Graduate School and Research in Engineering (COPPE) in Technological Center. The average of guidance for teacher in the period is 4.37. It was observed that the number of guiding teaching above average is 709 (36.6%) and below the average, 1.228 (64.4%). Finally, it was observed the 50 most productive researchers from UFRJ. As conclusions, the primary results pointed the predominance Technology area, followed by the Health Sciences; despite the Health Sciences area have approximately twice the graduate programs in relation to Technology area. The results point out either the researches scientific productivity linked to UFRJ, in the period analyzed, and confirmed the importance of scientometrics studies for the postgraduate evaluation and to the process of identifying the scientific productivity in the knowledge areas and postgraduate programs.

Keywords: Scientific productivity, Scientrometrics, Federal University of Rio de Janeiro

Scientific Publishing and the Use of Scientific Literature at Smaller Universities

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Abstract:

Purpose: In this paper we discuss the relationship linking the publication of the results of scientific research and the use of scientific literature accessible in consortia in Slovenian universities by answering the following question: does better access to information resources in science translate to higher quality research and its' publication? The performance of researchers work is assessed with the publication of research results in the scientific journal (especially in international scientific journal) and with citation of their published works. For successfully research work, it is crucial that researchers have access to the relevant scientific literature. As the research work and the research itself is co-financed by the government (often through research agencies) transparency and appropriate use of funds is necessary. Therefore, the access to electronic scientific content must be justified (cost) and appropriate (content). The case study was possible because University of Primorska did not have an access to consortia before 2010, so the comparison and tracking of changes was possible.

Methodology: Focusing on the 2010-2014 period, we have examined how many scientific papers written by the researchers at the University of Primorska have been indexed in Web of Science and Scopus, where the scientific papers were published and what the researchers cited in the published scientific papers. The survey link usage statistics for the consortia ScienceDirect, SpringerLink and WileyOnline with the quality and quantity of published papers.

Results: The share of scientific journals from the ScienceDirect, SpringerLink and WileyOnline consortia cited by researchers at the University of Primorska in

published scientific papers has gradually increased every year, ranging from 13.5% in 2010 up to 24.8% in 2014. The share of scientific papers published in the scientific journals indexed in the first quartile (WoS and Scopus) has also substantially, from 18.03% in 2011 to 31.55% in 2014.
Conclusion: The paper focuses on the analysis that better access to information resources in science will lead to higher quality research and the publication of research results in scientific journals. The results showed that better access leads to an increase in the use of information resources and also increases the number of published scientific papers.
Keywords: Scientific papers, Use of scientific literature, Researchers, University of Primorska, Slovenia

Scientometric Analysis of the Emerging Technology Landscape

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Abstract: For researchers and decision makers in any technical domain, understanding the state of their area of interest is of critical importance. This 'landscape' of emerging technologies is constantly evolving, and the sheer scale of research publication output in the modern era makes qualitative review increasingly difficult. Scientometric analysis is a valuable tool for the quantitative analysis of research output, and is employed by Dstl Knowledge and Information Services in support of our research activities, for applications including identifying opportunities for academic collaboration, and technology watching/forecasting to identify emerging technologies and opportunities that may have implications for UK Defence.
This paper aims to provide an overview of our approach to conducting scientometric analysis of research papers and patent submissions. The methods for extracting and disambiguating publications are described, and the qualitative inferences we seek to make, along with some of the associated limitations and potential pitfalls are also discussed.

Self-concept, Attitude and Perception as Determinants of Career Choice in School Librarianship among Library and Information Science Undergraduates in South-west, Nigeria

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Abstract: This study focused on self-concept, attitude and perception as determinants of career choice in school librarianship among Library and Information Science (LIS) undergraduates in south-west, Nigeria. The study included 3 research questions and 4 research hypotheses. These questions were answered and hypotheses tested at 0.05 level of significance. A self-structured questionnaire with five (5) sections and Focal Group Discussion served as the instrument for data collection. The population of the study included all the four hundred and three (403) library and information science undergraduates from the universities offering LIS in 2015 in south-west, Nigeria. Total enumeration of the target population was adopted and three hundred and twenty one (321) copies of the questionnaire was retrieved and analysed. This was done using

simple frequency, percentages, mean, standard deviation, Pearson's product moment correlation and multiple regression analysis.
The study shows that LIS undergraduates in south west Nigeria have a high self-concept towards career choice in school librarianship (grand mean total of 25.3 = 63.3% respondents). Also, the study revealed that LIS undergraduates have positive attitude towards career choice in school librarianship (grand mean total of 25.8 = 64.5% respondents). In addition, the study shows that LIS undergraduates have positive perception (grand mean total of 26.5 = 66.3% respondents) towards career choice in school librarianship. The result of the hypotheses reveals that there is a significant influence between self-concept (r = .283**, N= 321, P < .05), attitude towards career choice in school librarianship (r = .330**, N= 321, P < .05), and perception towards career choice in school librarianship (r = .330**, N= 321, P < .05) on choice of career in school librarianship among LIS undergraduates in south-west, Nigeria. The study also shows a joint significant influence of the three independent variables (self-concept, attitude and perception) on career choice in school librarianship. The study recommends that provision should be made for the establishment of a career path for school library media specialists in Nigeria to encourage those working in the sector. Also, Nigerian School Library Association (NSLA) should regularly visit school librarians to create awareness on the benefits of working in the school libraries and also to persuade them not to leave the school libraries to work in other libraries.
Keywords: Self-concept, Attitude, Perception, Career choice, School librarianship in Nigeria

Social Support, Work Motivation and Work Commitment of Library Personnel in Selected Private University Libraries in South-West, Nigeria

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Abstract: The study was designed to investigate social support and work motivation as factors affecting work commitment of library personnel in private universities in South-West, Nigeria. Descriptive research design of the correlation type was adopted. Data was collected from 206 library personnel in private universities in South-West, Nigeria. Structured questionnaire was used to collect the data. Simple frequency count and percentage distribution, mean, standard deviation, multiple regression model and correlation matrix table was used for the data analysis using Statistical Package for social sciences (SPSS). The findings of this study revealed that respondents like to spend most of their time at work. This shows their high level of work commitment. The findings further revealed that there is significant positive relationship between social support and work commitment of library personnel. Similarly, findings revealed that there is significant positive between job motivation and job commitment of the library personnel. Hence, the peculiar factors that hinder work commitment of the library personnel in private university libraries in South-West, Nigeria include: insensitivity to library staff welfare, inability to acquire "state of the art" working equipment, poor funding of the library, inadequate Information and Communication Technology (ICT) Tools and Compliance, lack of training and development opportunities, among others. Among the recommendations that was made include:

adequate provision of modern day library facilities to aid librarianship work, fair payment of salaries and allowances, encouragement of library personnel welfare, among others.

Keywords: Social support, Motivation, Work commitment, Library personnel

Status and Development of Clinical Informatics in Nigeria's Healthcare Sector

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Abstract: This paper examines the status, opportunities and challenges of clinical informatics in the South Africa health care sector, highlighting the efforts to promote access to and the use of clinical informatics in academic hospitals which is designed to train medical doctors in the country. It was observed in a recent survey of major international research databases such as Scopus that there is a gap in knowledge on clinical informatics in academic hospitals in the country due to a paucity of literature on clinical informatics while it is important for supporting modern healthcare services. Through a literature review, the paper provides a conceptual background of clinical informatics, discusses the status, opportunity and challenges of clinical informatics in South Africa, and highlights ICT access and use in hospital in the country. The paper discusses the implications of the reviewed literature through a PEST analysis. The paper provides invaluable information on clinical informatics in South Africa that can be used to inform and support further studies in growing field, and, the paper is a contribution to discussions and debates on the development of social informatics.

Strategies of Indigenous Knowledge Management in Libraries

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Abstract: In the knowledge economy's environment, effective knowledge transfer is critical in meeting demands for the continuous innovation of processes and products. Indigenous knowledge (IK) is the knowledge that people in a given community developed over time, and has made positive contributions in different areas of human activities like agriculture, health care, medicine, food preparation and preservation, land use, education and a host of other activities. IK is a very rich resource of developing countries and is of vital importance in development, preserving cultural identities, bridging the past and the present and transferring information required by various users and non-users of the libraries. Indigenous communities around the world face ongoing threats to the survival of their indigenous knowledge in view of its tacit nature. Traditionally, libraries have concentrated more on promoting a reading culture than on managing and promoting IK. If IK is well documented, packaged and deposited in libraries and information centres, it could be directly accessed by individuals. The aim of the present study is to explore how the indigenous knowledge can best be managed in the libraries in order to contribute positively to the community. Different types of knowledge held by indigenous community including major forms of indigenous communication channels are identified. Within this area of interest, this paper answers the question: what roles the library professionals can play

in the management and preservation of IK. While highlighting the IFLA mandate towards the management and preservation of IK, different activities associated with the management of IK — such as, collection, recording and documentation, organization, preservation and storage, dissemination and networking are discussed. Concludes that library professionals need to be proactive in devising strategies for the management and preservation of IK with the help of their professional knowledge and skills in order to ensure access to this valuable resource.

Keywords: Indigenous knowledge, Tacit knowledge, Knowledge management, Local knowledge, Knowledge organisation

Students' Attitudes and Perceptions towards the Values and Importance of Library User Education: a Comparative Study between the Fudan University and National Normal Taiwan University

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Abstract: This study aims at examining students' attitudes and perceptions towards the values and importance of user education provided by the libraries of two leading universities in Asia, namely the Fudan University Library (FDU), located in Shanghai and the National Taiwan Normal University (NTNU), located in Taipei. Via a comparative approach, this study aims at highlighting the similarities and differences in attitudes and perceptions amongst the students towards the series of user education programmes carried out by these two academic libraries. The data was collected through online questionnaire surveys with the student participants, together with a small number of face-to-face interviews with the user education librarians to reflect on the survey results. A total number of 109 survey responses were collected from both universities. Results of this study indicated that a majority of the students respondents considered library user education as an important part of their learning – as such library programmes enable them the necessary skills to make the best and maximum use the resources available (both in and outside of the physical library). The findings of this study are useful for identifying the different learning needs amongst these two groups of students, as well as other barriers that are preventing the library user education programmes to be integrated into students' overall learning, and the university's core curriculum as a whole.

Keywords: Library user education, University students' attitudes, Comparative study, Fudan University, National Taiwan Normal University

Students, Textbooks, and OER: Can We Afford Not to Listen?

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Abstract: Students and textbooks have a contentious relationship. Students are told they need to purchase specific resources and then become frustrated when those resources are underutilized in classes. Students want options, but cost -- the driving force -- is often the deciding factor for students, from choosing classes to purchasing

textbooks. To examine this issue, the student body at SUNY Buffalo State was surveyed, and they were asked to share their experiences and opinions regarding: 1) textbook costs and buying practices; 2) course load and enrollment decisions; and 3) academic achievement. This research also explored student preferences regarding format, their experiences with open educational resources (OER), and other factors. This presentation will highlight poignant findings and potential barriers derived from student data. For example, almost half of students surveyed had registered for fewer courses because of the cost of required textbooks. Buffalo State became better equipped to measure the impact of textbook issues on student behavior and success. Knowing these preferences and behaviors guided campus stakeholders (the library, instructional designers, etc.) in making data-driven, impactful decisions regarding course materials. One of those decisions was to focus attention on free or low-cost OER, and strategies and experiences as OER advocates on the campus and within the State University of New York system will be shared. Also, select OER resources will be shared with attendees, along with highlights from the OER guide for those wanting more information. (library.buffalostate.edu/oer) The presentation will also feature engaging data visualization and infographics to encourage brief discussion points and audience interaction.

The Study of Affecting Factors on Users' Mental Models of Digital Library Icons

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Abstract: This paper tends to investigate the factors affecting on users' mental models while using digital library Icons. The study uses qualitative and quantitative analyses to inform the study results based on data gathered from librarians and LIS students who worked at least with a library application. A questionnaire was utilized to collect participants' experience, the multiple-choice meaning-for-image test was used for icon evaluation and Interview was performed to investigate affecting factors on Users' Mental Models of icons. The results showed previous familiarity and experience "," adaptation of icons' function with their appearance, icons refer to unusual and unrecognized function than normal one" and "common icons' function in various applications" were the most important factors affecting on the users' mental models of icons. Implications of the research for theory and practice, and future work were discussed.
Keywords: Mental models, Digital library icons

Study of Information Search Strategies Used in the Capes Portal of E-Journals

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Abstract: The present research evaluated faculty information search behavior when using the Capes Portal of E-Journals. The faculties selected for carrying out this research were distributed throughout 17 federal Brazilian universities. The data was collected by means of a web-survey which used a mainly quantitative methodology, with some qualitative data. Data were collected through 04 questionnaires sent to users via email. This research selected responses for one question (question 14) of the second questionnaire which were quantitatively analyzed with regard to the search strategies utilized by users of the Capes Portal of E-Journals. The analysis revealed that 79,2% (4100) of the respondents), when searching for a subject, initially search a reference database in the Portal to identify articles or journals and, only after that, access the full text journal databases to obtain the full text. The research also analyzed qualitative data in the open field of question 14 where users cited other search strategies used in the Portal. Categories that emerged from the analysis of the content went through successive refinements. The analysis subdivided 507 comments into eight initial categories, which were regrouped into three main categories according to their content similarity: (1) User search for bibliographic references and full text using the CAPES Portal of E-Journals interface; (2) User search for bibliographic reference and full-text directly in the databases websites without using the CAPES Portal of E-Journals interface; (3) User search for bibliographic references in other electronic resources, and then use CAPES Portal of E-Journals interface to obtain the full text. It was found that category (3) stood out with the highest percentage (49,5%) of the valid comments, while category (1) obtained 33% of the comments, followed by category (2), which showed 17,5% of the comments. The results obtained in quantitative and qualitative analysis, show that a part of the users do not use the CAPES Journal Portal search capabilities to find the article, but only as a mean to obtain free access to the full text of the publications. The results show that the interface and search resources Capes Portal are not used in its full potential.
Keywords: Search strategy; Information searching behavior; User studies; Electronic journals; CAPES E-Journals Portal.

A Study of the Application of Marketing Practices in the Provision of the Information Services based on 4Ps Marketing Mix Model (Case Study: Academic Libraries in North Khorasan Province)

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Abstract: The purpose of the present study is to investigate the role of marketing practices in the provision of information services in academic libraries in North KHORASAN province using 4Ps marketing mix model in the academic year of 2014-2015. This study explores the relationship between the application of marketing practices and the provision of information services in the academic libraries in North KHORASAN province based on 4Ps marketing mix model. This is an applied research which uses a survey methodology for data collection. In this study, the full-time faculty members and students of the universities in North KHORASAN province were the statistical population out of which a sample of 157 subjects were selected using stratified-random sampling method.

The main data gathering instrument was a questionnaire, the validity and stability of which were evaluated by alpha factor using SPSS software. The results indicate the existence of a significant and direct relationship between the use of marketing practices and provision of information services. Also, the findings of independent t-test suggest the absence of any meaningful relationship between men and women in terms of their views about marketing practices. Further, the results of one-sided variance analysis revealed that six universities under study were not significantly different with respect to the five research variables.
Keywords: Marketing, Marketing in libraries, 4Ps mix marketing model

A Study for Raising the Reading Habit in Turkey: Shall we Play the Librarianship Game?

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Abstract: Reading habit and library use are not only individual, but they are also taken into account as a criteria of social development; it is widely accepted that there is an important relationship between the interest in reading and welfare. When the Turkish reading and use habit indicators are analysed, it is possible to say that this issue is kept up to date as a problem. In fact, the interest of Turks in library and reading seem quite high since the Ottomans. However, in the historical process, the lack of establishment of library use and reading habit prevented it to settle as a cultural aspect. But, the issue of education is among the major agenda items in Turkey, as in the whole world and, required legal arrangements have been made by the Ministry of Education and the government, especially to spread abroad the preschool education. Now, it is intended to develop and spread a reading habit based on the culture with an educated reader fundamental throughout the country. However, to achieve this goal certain important revisions need to be done in the current structure. The most fundamental revision is to convert the preschool "reading corner" that helps the children to interact with reading to a "Preschool Library". The most effective way, child - book interaction, for the process of turning into a reading society and raising an individual with the reading culture should be showed starting from the early years of life. That is why, in the preschool institutions, "Preschool Library" must be established. The library is one of the important fundamental social institutions that have an important role in the culture transfer. Also, there is a relation between reading abilities and library use habit. The more habit of library use is progresses, the more the society will produce knowledge. The goal of this study is to emphasize the necessity of the establishment of preschool libraries for implementing the reading culture in Turkey and turning the act of reading a habit by implementing the concept of book and library in the minds of preschool children, underlining that the reading activity should be started from preschool children. Also, in this study to help the preschool children gain the reading culture, during the Library Week, "Librarianship Game" will be explained by establishing a "Preschool Library" in a Preschool.
Keywords: Reading habit, Preschool library, Preschool children, Turkey

Studying the Effectiveness of a Storytelling/Story-Acting Activity on Ugandan Preschoolers' Emergent Literacy in Two Rural Ugandan Community Libraries

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Abstract: This presentation describes a longitudinal, Fulbright-funded research project aimed at exploring the impact of the rural village library in Uganda on preschool children's school readiness skills related to emergent literacy. Using two rural village libraries in Uganda (Mpigi Community Library in Mpigi and Kabubbu Community Library in Kabubbu) as a backdrop, the study explores the effectiveness of a library-based intervention known as the STSA (storytelling/story-acting) activity. The STSA activity is designed to enhance key domains of school readiness, including emergent literacy. Half of the children at each library participated in STSA twice per week for one year and were compared with nonparticipating children of the same age.
Keywords: Rural village libraries, Emergent literacy, Preschool children, Primary caregivers, Storytelling, Intervention, Quantitative methods, Mixed methods

Synergy and Partnership in Algerian Agricultural Sector: Knowledge Management and Capitalization

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Abstract: The objective of this study is to measure knowledge management of actors of agricultural sectors in Algeria through two major surveys. One for professionals to analyze their information practices and the other for researchers to understand their culture of knowledge sharing in order to offer a collaborative platform, tool of development and intelligence for the actors of the agricultural sector. Indeed, the actors of agricultural sector demand this collaborative tool in order to manage, to transfer and to share knowledge. They want to create this community of sharing and collaboration between research and economic sector.
The construction of an information system is a tool for development and transfer of research results to the destination sector of agricultural production. Because it is better for us to propose a model of information system capable of managing intellectual capital in the Algerian agricultural sector and generate value from intellectual assets.
Then, the creation of a shared space should be considered. Such a space will provide an accurate visibility of information and knowledge, to strengthen the institutions, setting up networks of actors. The point is to establish a synergy and a partnership between (scientists, professionals, political leaders…).
Keywords: Collaborative platform, Collaborative work, Information System, Knowledge Management, Agricultural sector, Algeria

Teaching Media Literacy, Did we Forget Literacy?

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Abstrct: The renewed core curriculum in Finland that will be implemented in schools

in 2016 puts special emphasis on thinking skills. Information search (or better: knowledge search/ seek) is an essential ingredient in thinking skills, and it is taught to school classes also in public libraries in Finland. New media literacy has been included in library pedagogy for some years now, and we need to ask whether our pedagogy really agrees with the goals of the new core curriculum for schools. This paper suggests that Nelson Goodman's semiotics provides an exellent frame for approaching the special problems of information search pedagogy in libraries, and probably in schools as well. If thinking presupposes understanding the basic structures which are inherent in a specific area of knowledge librarians, especially in their pedadogic work, should be aware of the distinction between literacy of information technology and literacy of the semiotic systems in which knowledge is incorporated.
The authors suggest that all successful knowledge seeking requires that the seeker has already internalized an effectively structured disposition of the topic area upon which the search is carried out, in other words, that she or he has already acquired literacy on this topic area. At least some studies concerning the use of new media technology in classrooms seem to support this view of knowledge search, and therefore suggest that we should be careful in not giving up too soon traditional teaching and learning with books. The ability to seek and find knowledge doesn't depend essentially on the medium, especially not on the latest applications of search technology. Knowledge is literacy, in other words, ability to recognize and use the rules of different symbol-systems in order to ”make worlds”, as Goodman used to put it (these ideas were already discussed by Leena Pylkkö in the QQML-14), and there is no successful knowledge search without this ability. Both empirical and philosophical arguments suggest that there is a danger that teaching practical use of new technology gets confounded with literacy of the subject matter itself, that is, mastering a semiotic system at hand. Only by avoiding this danger, libraries can support the new Finnish curricular in its emphasis on thinking skills.
Keywords: Media literacy, Information search pedagogy, Semiotics, Nelson Goodman

Technology Transfer and Libraries: Embedding the Library in the Technology Transfer Process

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Abstract: Technology transfer is becoming increasingly important to universities as a way to supplement their budgets and to attract and retain top researchers. This paper argues that libraries are perfectly situated to embed in the technology transfer pipeline. Libraries can do this by providing access to high quality resources and by contributing better informed research to the technology transfer decision-making process. A discussion about how to approach the tech transfer department and an overview of creating a competitive intelligence report is provided.

Tendency Study of Library and Information Science Research Studies in Iranian Public Universities during 2003-2012

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Abstract:
Purpose: The study aims to identify the provided LIS (Library and Information Science) research studies by their subject matter and year of publication as well as their subject gap, orientation, and evolution process in Iranian public universities.
Design/methodology/approach: Descriptive survey method along with content analysis has been used in this study. Statistical population contains 749 dissertations and theses in the Iranian Public Universities during 2003-2012 in the LIS field. In fact 7 main categories and 17 subcategories were assigned for content analysis of researches according to ISTA and LISTA category schema. Researcher-made checklist is used to collect data and the collected data were categorized by the mentioned schema. Finally classified data were analyzed and presented by using figures and tables.
Findings and Results: Findings and Results demonstrated that library studies, Information Retrieval, Bibliometrics, printed and electronic information source, cataloging and classification, information industry, and information management categories are more considered subjects in Iranian public university studies.
Keywords: Research Subjects, Library and Information Science, Public Universities, Iran, Theses

Thematic Relevance Analysis of Books Checked Out in Public Libraries of South Korea

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Abstract: This paper is one of the outcomes from the library big data analysis project administered by Ministry of Culture, Sports and Tourism of Republic of Korea. The goal of this paper is to analyse users' library collection usage behaviour by subjects and to determine its inter-subject relevance based on 424 million checkout records retrieved from 502 public libraries in South Korea. Checkout frequencies for each subject were analysed in accordance with 10 classes, 100 divisions, and 1000 sections of Korean Decimal Classification (KDC) and the thematic relevance was investigated according to concurrent checkout records of library users.
Keywords: Public library, The number of books checked out, Clustering analysis, Bibliometric analytics, Thematic similarity

Towards a Better Organization of Online Customer Reviews Based on Various Aspects of a Book

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Abstract: Online customer reviews present one of the most important factors in book purchasing or borrowing decisions. However, only well-organized reviews are useful, while disorganized product evaluations can cause a bad purchasing experience. To optimize product information, Amazon, the biggest online bookstore, is already

combining all formats and editions of a work under a single title and, consequently, all customer reviews for a work. This method somewhat resembles the Functional Requirements for Bibliographic Records (FRBR), a library-based conceptual entity-relationship model, which considers a work at various levels of abstraction. While grouping different editions helps reduce the number of results and offers users a better overview of what is available, merging customer reviews may cause some problems. In our previous studies we have found that reviews do not focus only on the work-level aspects of a book, but also on the characteristics of a particular edition, on the received copy, or even on the customer's buying experience. We have also found that customer reviews that describe several attributes of a book are usually marked as more helpful than comments focusing on only one aspect. Due to a large amount of reviews and customer interests in various book attributes, any online bookstore could use a filtering tool that would help individuals select only comments describing a particular aspect of a book. Our paper presents a methodological framework of a study that aimed to identify which aspects of a book people recognize when reading book reviews. Furthermore, it tested whether collaborative tagging is an appropriate method for better organization of online book reviews and tried to verify the applicability of the FRBR model in this context. Research was conducted in three rounds where we used a combination of an interview and a task solving method. In the first round, twenty-five participants read modified Amazon reviews and added tags to describe the book attributes they had identified. We compared the obtained tags to the overlapping FRBR entities and created categories that could serve as a filtering tool for customer reviews. We tested the applicability of these categories with the same set of participants and the same set of reviews in the second round and with a new group of twenty-five participants in round three. The results show that people consider book information at various abstraction levels that match those expressed in the FRBR model. We also found that collaborative tagging could be an effective method for better organization of online book reviews, however, only actual implementation of this tool could disclose its true usefulness in an online bookstore context.

Keywords: Book reviews, Amazon, FRBR, Book aspects, Book attributes, Interview, Task solving method, Tagging

Towards Designing an Indicator for Scholarly Academic Research Impact based on h-index

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Abstract: Present paper discusses Scholarly Academic Research Impact (SARI). According to H. E. Hirsch, the main criteria for devising an indicator are number of citations, scientific age of author, subject of the papers, self-citations, simplicity, universal applicability, least sensitive to small change of bibliographic record etc. The h-index has included some of these criteria. However some criteria still need to be incorporated during calculating h-index. Here I have tried to consider some relevant components to h-index for better reflection of SARI. I think h-index will be in core but some other measurements should be incorporated for better reflection of the impact. The total number of citations or average number of citations per article should be included to for calculating the SARI. G-index includes some articles having very high citations but does not include citations beyond hirsch's core. But hT-index has

the provision to give weightages of all the citations of all the articles even beyond Hirsch's core but it is very complicated to understand and to calculate. The scientist having higher scientific age naturally will get more citations than the younger, so we need to incorporate this criterion when calculating SARI. Therefore technique should be developed to conform the relation "SARI will be inversely proportional to Scientific Age of the researcher or scientist". The SARI should have universal applicability (for author, journal, publisher, country etc.). Again variations among the disciplines and subjects need to be kept in mind when designing SARI, so that the issue should be normalized. The language biasness is very hard to avoid during designing SARI. There are so many indicators like JIF, h-index and its variants, altmetrics etc, but my proposal is to develop a single indicator which should include all the aspects of all the indicators as far as possible. In the present context of electronic web environment we have to measure societal impact along with the scholarly academic impact. In this regard 'altmetrics' is basically the tool for weighing societal impact of the scholarly articles by counting number of downloaded, viewed, re-used, shared, liked etc. We cannot ignore these criteria in the social networking environment. But altmetrics is not so crystallized as it depends on web visibility and validation. Therefore present study intentionally has excluded altmetrics aspect of SARI. I have not given any concrete formula rather just have wanted to draw a theory for designing a SARI indicator based on h-index.

Keywords: h-index, Scholarly Academic Research Impact (SARI), Tappered h-index, g-index, Self-citation

Trend & Challenges in Development Public Libraries with Special Reference to South Indian States: Tamil Nadu, Karnataka & Goa

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Abstract: In this paper I am going to explain how these states are rendering library services to public. Now they are shifted from traditional to modern techniques. The year of enactment of Public library legislation is given, there financial resources are giving. The number of Libraries in each state is given. Under this survey has been made. Also each state central library's services are explained Comparative statement. 3 States are given here. There future plan also explained here. Establishment of RRRLF in 1972 for the development of Public Libraries & its contribution for the development of Public Libraries. National Knowledge Commission's working Group on Public Library and its recommendations are given. After NKC suggestions Central plan to Establish 7000 Libraries in Rural are given here. On the recommendation of NKC National Mission for Libraries is established to develop public libraries. National Library for Public Library is given training to Librarians & there main aim is give here. Under this mission its achievement is explained here., Central Government plan to fast trac E- library its program and aim is given here Latest development is Formation of Think Tank on Library & Information Services. To more information survey of three state central of Tamil Nadu, Karnataka & Goa has been made. Next survey of some Metro Politian central Libraries of Karnataka has been made they are Shimoga, Tumakuru,Mysore Monday & Mangalore given here. I am giving the exact trend of & challenges are explained.

This brings that totally the trend and challenges that are facing towards modernization of Public Libraries in India.
In doing these what are the challenges are faced by each state is explained here. Also opportunities are also given
Keywords: Library legislation in India, RRRLF, NKC, National Mission for Libraries, Central plans to Fast track e-Library, Connemara Public Library, Karnataka State Central Library, Goa State Central Library, Anna Centenary Library

Turkish Law on the Right to Information and Records Management Policy

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Abstract: Although the Republic of Turkey's first democratisation process by setting up another party within the National Assembly started in 1924, right after the establishment of the new Republic, became an unprosperous attempt. In 1945, the government gave a second start for a multiparty system. Since then, there have been various political manouvers by the parliament for having a more democratic and accountable country. For this purpose, the Turkish Law on the Right to Information was accepted by the parliament in October 2003 and went into effect in 2004, six months after the law published in the Official Gazette.
The first prerequisite for having such a law is to have a fully accepted and applied records management program by every organisation and institution within the legislative framework of the act. The first legislation was enacted in 1934 regarding the elimination of unnecessary documents within government offices, but it never became fully operational. Following legal arrangements were made within 20-30 year intervals. The last law on this issue was enacted in 1988 and is still in power. This paper will be dealing with the infrastructure and effectiveness of these arrangements within the country but not the political outcomes of the Law.
Keywords: Freedom of information law in Turkey, Records management in Turkey

Understanding the Impact of National Library Association Membership: Strengthening the Profession for Sustainability

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Abstract: This paper provides an overview, including methodology and findings, of a current doctoral research study of the impact of national library associations. The study adopted, with slight modifications, the impact assessment framework provided by *ISO 16439:2014 Methods and Procedures for Assessing the Impact of Libraries.*
As many of our library associations struggle to remain aligned with the needs and expectations of their members they face possible demise through declining membership, participation and engagement, and through financial uncertainty. In order for the associations to survive and to achieve growth and sustainability through appropriate vision and strategies it is important to consider their value in terms of impact, that is, the difference they make to those who choose to become members and to retain their membership over time. This study applies the framework provided by

ISO16439:2014 to the national library association environment to explore and gather evidence of impact. To align with the ISO model, impact is explored in three categories:

1. Impact on individuals - explores changes in skill and competence; changes in attitude and behaviour; career success and individual well-being.
2. Impact on the employing organisation - explores enhances reputation and visibility, professional awareness and understanding the value of the profession to the organization.
3. Impact on the profession - explores the impact of the associations on the profession of librarianship including social inclusion and cohesion; information, education and resources; promotion of the profession and sustainability of the profession.

This qualitative study comprised semi-structured interviews conducted with members of national library associations in Australia, New Zealand, the United Kingdom and the United States during the third quarter of 2013 with the analysis of the data being completed in June 2015. The findings of the study identified twelve ways in which membership of a national library association impacted on the individual members, their employing organisations and the profession of librarianship. The paper describes the twelve impacts and their causes as perceived by the study participants. It discusses association participation, professional community, and leadership, and describes the implications of the study for associations, members of professions (including the LIS profession) and for the employers of professionals.

Although focusing on national library associations, the study and its findings are relevant across a wide range of associations supporting the LIS profession and also those supporting other professions.

The study contributed to research methodologies by testing the use of a qualitative assessment tool in a way that could be transferable to other associations both within and external to the library environment and to enable it to be adapted more broadly for other purposes within the library and information environment.

Keywords: Impact assessment, Professional associations

Unveiling Portuguese governmental libraries trends and challenges: confluence of futures studies, action research and stakeholder analysis

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Abstract: In March 2016, the Directorate General for the Qualification of Public Workers (INA) created an Informal Working Group on Central Public Administration Libraries – *Thinking the Future* (GIBACE) whose mandate was to develop a strategic guidance document for this library sector. The purpose of this paper is to discuss the methodological approaches used in this process, namely the confluence of future

studies, action learning and stakeholders' analysis, integrating different practices (academy, experts, and organizations) in a participatory action research to think and create shared futures for Central Public Administration Libraries (CPALs).
After presenting the methodological approaches, particular attention is given to the outputs generated by the main phases of the action research process: (1) experts' vision(s) of future; and (2) stakeholder analysis, participation and (co)construction of CPALs´ shared futures. Finally, GIBACE's recommendations for action are presented, as well as some final remarks concerning the opportunities for research and practice in the Library and Information Science arena.
Keywords: Governmental libraries; future studies; action learning; stakeholder analysis; change management methodologies;

An Update on Academic Librarian Research: Attitudes, Involvement, and Perceived Capabilities

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Abstract: This presentation reports the results of a 2015 survey, an update of a 2010 survey of academic librarians about their attitudes, involvement, and perceived capabilities utilizing and engaging in research. The purpose of the original survey was to inform the development of a continuing education program in research design, which became the grant-funded project *Institute for Research Design in Librarianship* (2013-2016). The 2010 survey introduced a research self-efficacy scale designed to measure the relationship between confidence and research success. This scale provided new insights regarding how prepared librarians believe themselves to be with regard to conducting research. The 2015 survey employs an expanded version of the original research self-efficacy scale.
The current study re-examines a number of the individual attributes and institutional supports that contribute to academic librarian research success. This presentation will report on the findings of the latest survey and explore the similarities and differences in the five-year span, providing additional insights into the relationships among education/continuing education, research confidence, and research success.

Usability Evaluation for Book Recommendation Application based on Big Data Analysis in Korea

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Abstract: With the development of smart devices such as smartphone, the rise in time spent on mobile leads to a change in the information environment. According to the survey conducted by the Ministry of Culture, Sports and Tourism of Korea (MCST) in 2013, the amount of time that Korean adults spend reading books decreased compared to that of 2011, and the main reasons were analysed to be lack of the habit of reading, lack of reading time due to the use of smart devices. These results suggest that the smartphone is changing users' media use patterns as it makes connecting with people and finding information easy. Consequently, MCST and KISTI have developed mobile application concerning book recommendation based on library big data to help

people enjoy reading books in Korea. In order to optimize the development of usable mobile application, it is required to consider the evaluation of the user-system interaction of this application. After conducting both user test and analysis, the results described as usability problems are mapped and discussed for identifying factors which users consider important when they use the application. This paper presents improvement on book recommendation application and the approach taken in the study will also be helpful to design an effective strategy in the mobile application regarding public libraries.

Keywords: Usability Evaluation, Mobile application, Book recommendation, Big data analysis, Public library

The Use of Mobile Technologies for Mobile Service Delivery at Makerere University Library

Carol Ilako

Abstract: Current trends in libraries require that students are able to access information and services beyond library buildings. Makerere University Library (Maklib) faces a number of challenges with regard to online and remote access to library resources and services. One possible solution to this problem lies in the use of mobile technologies. This study attempted to investigate how mobile technologies can be used to provide mobile-based library services at Makerere University library. A pilot study was conducted involving 31 postgraduate and 37 undergraduate students using questionnaires as the data collection tool. Qualitative data was collected and analyzed using Google Drive and was presented in form of text and graphs. Findings indicate that majority of Makerere University students own mobile phones that are internet enabled and those who do not own them have expressed interest in acquiring them in order to stay abreast with new technology. Although students owned internet enabled phones, they mainly used these devices to make and receive calls, and access different kinds of information ranging from news, social media to academic information. The services that students wanted to access using their mobile devices were: search the catalogue, request an e-book, request an item, chat with a librarian, view library news, access subject guides, search the library database, view library opening hours, View library contact information, Quick response, renew library items, book study group rooms, text messaging, book computer labs and view library map. There are also various resources that students expressed interest in and these include: Google searches, Google scholar, e-books, reference materials and e-journals. Convenience, flexibility, time saving, affordability are some of the reasons for acceptability of Mobile library services and resources. The majority of the respondents were positive about the implementation of the mobile services at Maklib however, some of the challenges mentioned by students include high cost of the devices and the ability to access internet services while in office. The study concludes that:

- Mobile technology awareness is rapidly increasing among Ugandans especially students in higher education such as those at Makerere University.
- Ownership of mobile devices is widespread among both the postgraduate and undergraduate students.
- Both postgraduate and undergraduate students expressed their interest in accessing mobile library services and resources.

Recommendations that ought to be adopted by Maklib and any other academic library willing to implement mobile library services are discussed.

Use of Facebook by Deanships of Library Affairs: Perspectives of Library Staff at the Universities in Saudi Arabia

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Abstract: The use of new social networking sites to increase the communication with the university library for students and staff was discussed and examined in 42 universities library deanships in KSA (include both governmental and private universities). The study employed both primary and secondary data collection methods in order to explore the use of Facebook in Deanships of Libraries Affairs (DLAs). The data collected were processed and tabulated with discussions. The researcher found that the use of Facebook pages for libraries is very important in our time, especially with the increasingly use of social networks and smart phones services, especially in the Arab countries. Developing that service will allow students and researchers to have easy and efficient access library services.
Keywords: Social networking sites, Deanships of Library Affairs, Web 2.0 application, KSA

Use of Reading Materials in Maulana Azad Library, Aligarh Muslim University: A Quantitative Study

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Abstract: Reading material is an essential part of any institution or organization. For the growth of any educational institution, reading material plays a vital role. Without reading material there is no existence and use of educational institutions. Print as well as e- materials both are the pillars of education society. It is important to have the quality of reading as in the words of Sir Richard Steele, "Reading is to mind what exercise is to body", so if some-one has the quality of reading, only then he can understand the worth of reading material. Reading material is any matter that can be read; written or printed text. It is because reading is a part and parcel of the life of a human being. It plays a great role in the life of a man. Maulana Azad library (MAL) is a mile stone in the history of AMU; it is one of the largest university libraries in the world. It has a great collection related to the different subjects. MA Library comprises different types of reading materials as 18,00,000 documents including books, periodicals, newspapers, theses/dissertations, reports, pamphlets, manuscripts, paintings, photographs, CDs, microfilms, databases, e-books, talking books etc. It also has the rare collection of manuscripts in Urdu, Persian and Arabic Languages. This library plays a vital role of reference library also. Library has about 25,000 effective users related to different disciplines. They are using all types of reading materials for improving their knowledge, and fulfilling their educational requirements. Thus, to know the value and use of reading materials is equally important for the librarian also for further improvisation in the collection policy and updating their delivery mechanism. The study is planned to focus on the quantitative use of reading material among the users over a span of time in AMU. So as to know the use of reading

material, a well-designed questionnaire will be prepared by the researcher to assess the effectiveness of use and usage data will also be collected from the different sections, i.e, circulation section, periodical section, and computer section for online use statistics of electronic sources. The data collected from all sources will be analysed and interpreted with the help of statistical tools and presented graphically along with the recommendations.

The Use of WhatsApp as a Teaching and Learning Tool and as an Information Resource by the Faculty Members of the Department of Information Studies at Sultan Qaboos University, Oman

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Abstract: This research aims to investigate the reality of WhatsApp use among faculty members at the Department of Information Studies (IS) at Sultan Qaboos University (SQU) in the Sultanate of Oman as a tool for teaching and learning, as well as the information available in WhatsApp teaching groups, in addition to the use of WhatsApp as a source of information. Data were collected through the interview method. The results of the study showed that three faculty members out of nine are using WhatsApp in teaching and learning. They use it for class discussions and explanations of projects. The study showed that the three faculty members in the Department of IS who used WhatsApp in teaching and learning are using it in general to communicate with the students and for educational purpose. Also the study showed a relationship between age, nationality and specialization.

Keywords: College of Arts and Social Science, Faculty use, Gender, Information sources, Sultan Qaboos University, WhatsApp use

The Use of World Regional Collections among North American Research Libraries

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Abstract: Although much has been written about cooperative collection development and area studies collections, little research exists that assesses the effectiveness of these programs or their impact beyond their home institution. Items in these collections are often scarcely held or “hidden” due to either a lack of specialized knowledge to facilitate their discovery or the financial resources required to maintain them. Such collections require trained personnel with the ability to work with one or more vernacular languages and knowledge of the publishing landscape in different geographic locales. To ensure access to these collections, research libraries developed innovative resource sharing and cooperative collection development schemes in order to provide continued access to materials.

This session will examine lending history of developed area studies collections in order to evaluate the impact of resource sharing and cooperative collection development. By examining five years' of a major research library's resource sharing data for outgoing materials in Less Commonly Taught Languages (LCTL) and outgoing materials published with a foreign imprint, the authors will seek to draw conclusions about a cooperatively stewarded collection and make recommendations about the directions that research libraries should pursue in order to provide service at a regional and/or national level.

Keywords: Resource sharing, Cooperative collection development, Interlibrary loan, Area studies, Foreign language, Imprint language

User Attitudes towards PDA in Academic Libraries

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Abstract: Many libraries initiated patron drive acquisitions to put Ranganath's "every reader his/her book" and "every book its reader" laws into practice. The practice also aims at increasing book circulation rate, maximizing budget efficiency, and in particular creating an interactive patron collection development environment. The research examines and explores the patron-initiated collection recommendation services in academic and public libraries, the stakeholders' attitudes towards patron-driven acquisitions (PDA), the relation of PDA practice and interlibrary loan service, and the probable effects in community engagement.

The research, funded by Minister of Science and Technology, Taiwan, employs mixed methods, including the questionnaire survey of 807 users in academic and public libraries, face-to-face interviews with library directors, and a case analysis study of circulation records of two university libraries. The talk proposed for the conference focuses on the academic library users survey conducted between May and September in 2015. The results addressed the following aspects: (1) the differences between experienced and non-experienced users in book recommendation in terms of personal purchasing behavior, preferences of format (paper-based vs. electronic books), usage pattern of the interlibrary loan, (2) users' attitudes toward PDA, such as limitation on the price, publication dates and subject of the book, (3) users' attitudes toward textbooks, and (4) user evaluation of the services. Statistical significances exist in most items.

User Education in University Libraries of Pakistan

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Abstract: Basically the term user education comprises of two ingredients; user and education. The user means the person who uses the library. In view of Tajomurity, user is sovereign, is the king of all library activities, and all activities centered on him/her. Literary "education" or instruction highlights the methods by which the user is being taught and made aware of library contents. The prime aim of this study is to know the status and impact of user education on the promotion of library culture in Pakistan. To meet the specific objectives of the present investigation, a quantitative research methodology along with a comprehensive literature review and web analysis has been employed. The universe of the present study is delimited to the public sector

university libraries of Pakistan. The website of Higher Education Commission (www.hec.gov.pk) was used to identify the names, status and web addresses of the public sector university libraries. The findings revealed that Islamabad, Punjab have gone far ahead followed by KP and Sindh in educating their readers. The province of Balochistan needs improvement in this connection. It is suggested that the librarians should receive the users with open arms. The behavior of the librarians should be user-friendly. Small interviews with users are also helpful to tackle the problems of the readers.

Users' Contribution to the Innovation Activities of University Libraries

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Abstract: Innovation activities are considered to be one of the backbones of information centers' development process. Some crucial stages of innovation activities, such as customer's needs, desires and interests, are to be taken into account throughout the development process of services. Compared to other library types, university libraries have more efficient innovation potential on entrepreneurial-minded, intellectual and eager users. In order to make this potential beneficial, users' innovation skills and experience are to be identified in advance and evaluated in details.
The purpose of this study is to assess university students' knowledge and experience on innovation. Moreover, this context also examines the existing relationship between users and university library management units. Marmara University Central Library, Turkey and The Josip Juraj Strossmayer University of Osijek Library, Croatia users were asked to fill in a questionnaire. Based on the questionnaire results, which were assessed both individually and comparatively, some recommendations have been made in order to contribute to the user service quality of university libraries.
Keywords: Innovation, University libraries, Library users, Marmara University, The Josip Juraj Strossmayer University of Osijek

Using a Mixed Method (Qualitative and Quantitative Method) in Selecting Relevant Quality Measurement Indicators for Academic Libraries: A South Africa Perspective

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Abstract:
Introduction: Higher education institutions in South Africa are subjected to quality reviews every five years. However there are no revised quality measurement indicators for libraries. The existing Committee for South African Higher Education Librarians of South Africa's (CHELSA) measures for quality were adopted using American Colleges and Research Libraries (ACRL) quality guidelines. With so many developments taking place in higher education libraries, nationally and internationally, there is a need to revise library quality measurements.

Problem Statement: The existing higher education quality measurement indicators for libraries have been overtaken by a series of developments that took place in the higher education sector and in library and information practice. The study proposes to investigate how relevant existing library quality measurement indicators are for South African Higher Education Libraries
Aims/objectives: This study seeks to investigate which of the existing quality measurement indicators from the CHELSA quality measurement guidelines are still relevant, and what new indicators could be added to the tool to meet the current needs of staff, post graduate students and librarians.
Research design will use focus groups comprising five participants per study target at the researcherB's home institution to test collection of qualitative data. To test the quantitative data collection instrument (questionnaire) three participants will be piloted. The study target will be ten faculty staff representing five faculties per institution; ten post graduate students from five faculties with five librarians with a role to serve faculties viz. faculty librarians, subject librarians or information specialists.
Research methodology: The researcher plans to employ a mixed methods approach aimed at collecting qualitative data using focus groups, and quantitative data using questionnaires Literature review: There seem to be no one-size-fits-all-libraries ways of developing relevant quality measurement indicators for higher education libraries (McGregor, 2001). Each country has to pick and choose from quality measurement indicators for various existing models that have been adopted in the world. Total quality management, Association of College and Research libraries (ACRL) and (LIBQUAL) an electronic internationally recognised quality recognised quality measurement tool developed by American Association of Research Libraries to assess library customer satisfaction level of library services. A series of publications on quality, its definition in the library and information service context will be explored with various international approaches in developing quality measurement indicators or standards for libraries.
Keywords: Higher education, Academic libraries, Quality assurance, Measurement indicators, Quality, Continuous improvement, Benchmarking, Quality management, Accreditation, Customer satisfaction

Using New Venture Competitions to Link the Library and Business Students

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Abstract: New venture competitions are designed to motivate university students to develop business plans and to present them to a panel of judges including business community members. Wilfrid Laurier University has integrated a new venture competition into business curriculum. This paper intends to share the experience of a new business librarian at Laurier Library in working with faculty to assist students in their new venture competition. A short survey is conducted to evaluate how students use the library resources and services for their projects. The results show that course guides and databases are most used library resources. Marketline, GMID and Financial Performance Data are three databases that are found most useful by the students. Expectations of the subject librarian include creating a tailored guide for the competition, delivering specialized instruction sessions and providing research consultation services on a continuing basis. It is critical to build a close partnership

with faculty, to fully assess the needs of students and to provide tailored services. The challenges facing the librarian include exploring innovative approaches to reaching out to more students, demonstrating the librarian's value and meeting students' various research needs.

Keywords: new venture competition; reference service; business librarian; librarian-faculty collaboration; Wilfrid Laurier University

Using Geographic Information Systems to Support Social Sciences Research: The Web Applications in NUS Libraries' Digital Humanities Initiative

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Abstract: A Geographic Information System (GIS) is a system for spatial data processing and analysis to support knowledge discovery across a wide range of subject areas, such as urban planning, economics, demography, history, earth sciences, and human-environment interactions. Despite the application of GIS in various fields, uptake among social scientists in Singapore has been relatively limited to date. An important reason for this has been a lack of access to a convenient geospatial cyber-infrastructure, which integrates spatial data, modeling, analysis tools, visualization, and researchers through the Internet.

National University of Singapore Libraries (NUS Libraries), aiming to be a premier knowledge hub promoting the University's vision as a leading global university centred in Asia, launched two digital humanities projects in 2015. These projects were collaborative projects initiated and led by NUS Chinese Library with support from the Digital Humanities Team, which was newly established in the same year.

The first project is named "Map of Origins: Chinese Clans in Singapore". Chinese Clan associations are important nodes in the network of relationships amongst Chinese communities in Singapore. Many Associations were formed to assist early Chinese immigrants since the early 19th century, playing significant roles in the nation's development and the identities of the communities they serve. This project maps out the distribution of Chinese Clan Associations on a web GIS platform. An interactive interface allows users to visualise geographic patterns of dialect clan associations, establishment of clan associations over time, membership sizes of clan associations as well as view indexes of clan associations sorted by kinship, locality, name or year established.

The second project is named "Singapore Places of Worship". The project presents a collection of mixed media artwork of places of worship by a local artist, Dr Ho Chee Lick. Plotted on an interactive map with 3D street view, the drawings illustrate Singapore's beautiful multi-religious landscape, covering Chinese temples, Islamic mosques, Hindu temples, Sikh temples, churches and other places of worship in Singapore. For each drawing, we list the names, address, year established, date of sketch as well as relevant literature and websites. Indexes of drawings have also been compiled.

The talk will present the rationale and applications of the two GIS websites for supporting social sciences research, especially history, culture and human-environment interactions in Singapore context.
Keywords: Geographic Information System, Digital humanities, Singapore, Chinese Clans associations, Kinship, Locality, Places of worship, Temples

Using Hermeneutics to Inform Bibliometric Research: A Mixed Methods Approach

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Abstract: The use of bibliometric techniques to understand large and complex data sets associated with library collections has had fortuitous results and has contributed to better understanding of the context within which information is managed, especially at the local level and with reference to priorities identified to create value for user groups.
Research into bibliometric methods has tended to be situated within a largely empirical paradigm consistent with the need to control, identify, classify, predict and describe literatures, information systems and publishing formats Just as these goals require data analysis and modelling, other applications of bibliometrics require researchers to trace, design, improve, develop and evaluate various solutions, methods of qualitative analysis and synthesise data to better make sense of the context which has human, subjective and, ultimately, interpretive qualities (Connaway & Powell, 2010, pp. 82-83). While there has been a great advance in the ability to interrogate large data sets, with resulting increases in verifiability and reliability, to better appreciate the flow of scientific knowledge the process of mapping knowledge domains that allow a level of semantic certainty (or efficacy) to be attained at more than quite simple levels (co-word, co-citation, automatic algorithmic sorting) is both difficult and time consuming (Boyack, 2004, p. 5192). There are also problems associated with the reticence of researchers to undertake research which includes both quantitative and qualitative aspects.
This paper explains some of the problems which initiate the need for a mixed method research associated with research into the knowledge domains that characterise public libraries in Australia. While the aim of the research is to understand the way in which knowledge is represented and has distinctly hermeneutically-oriented aims, the methodology requires a protracted, empirical research project which objectivates the knowledge domains which are the *prima materia* of the research, even though this is at one level inconsistent with the broader aims of the research (which seeks to understand how librarians nuance such meta-theoretical and epistemic concepts). The paper presents research into how the problems associated with working with seemingly incommensurable paradigms (Guba, 1990) can be overcome through recourse to a phenomenological realism (Ales Bello, 2015; Morris, 2007) and a dialectical playing out of the issues such that the origins of the antinomy associated with the polarised positions can be harmonised (if not entirely neutralised). Through this exegetical approach, which allows for the strengths and weaknesses for each method to be carefully articulated and placed within a historical and ontological

context, what seems to be problematic from an epistemological perspective is naturalised through a more hermeneutical approach which avoids many of the problems associated with incorporating declaratory and apophantic sociologies of knowledge into the research design (Kelly, 2016).

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UX at Imperial: a case study of qualitative and quantitative approaches to Primo usability studies

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Abstract: This session will explore the research methods and outcomes of the three user experience (UX) investigations conducted in 2015 and early 2016 at Imperial College London on Primo and Primo Central. The session will offer insights on how to conduct user experience investigation including research and data analysis on Primo using qualitative and quantitative methods and development of theory using a grounded theory approach.

The Session will also explore studentsB' experiences and expectations of Primo; show examples of how UX investigation has informed our understanding of how to improve the Primo interface and provided us with direction for future iterations of research and improvements.

Along the way, the challenges and difficulties that come with doing UX investigation will be discussed and lessons learned about how to avoid them shared. This session is suitable for those who are currently doing, or planning on doing, UX and usability research on their Discovery platform or anyone interested in usability studies in general.

Keywords: UX, Usability, Grounded Theory, Research Methods, Case Study, Data Analysis

Walking a Tightrope: The Impact of Academic Library Consortia on Members

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Abstract: For over fifty years, the University of Illinois at Urbana-Champaign's Library worked with a number of consortial partnerships to facilitate access to resources, address space and storage needs, and to acquire content for the use of scholars on our campus. Currently, multiple consortia provide a host of services that contribute to the Library's success in meeting the needs of a comprehensive research

campus. These consortia support programs focused on cooperative purchasing, resource sharing, digitization, data stewardship and digital curation, cooperative storage for print resources, and professional development for employees of member libraries. In all of these endeavors, the consortia play a crucial role in advancing the collective interests of their membership, frequently while enabling individual member libraries a level of freedom that enables them to continue to fulfill their roles in the many overlapping state, local, and national consortia that characterize the operational environment in the United States.
The presenter will begin with a discussion about the history and development of consortial library services that support the University of Illinois at Urbana-Champaign, the governance of some of these organizations, and the impact these organizations have on the day-to-day decision-making at one member library.

Web Content and Digitization Patterns of Tribal College Libraries within the Great Plains Region

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Abstract: The Web content and digitization patterns of twenty-three tribal college libraries from the Great Plains region were examined to determine what types of services, programs, digital resources, and social media were promoted on their Web sites. The results of this study differed from a previous 1998 study by Kaya, which found that tribal libraries merely support the institutions and are "not recognized as an integral part of the activities of a tribal college, that is, as an equal partner in the academic endeavor" (p. 245). Kaya noted that the success of students enrolled in tribal colleges was not contingent upon libraries and the resources they provide. Findings of this study indicate that today, the library is an integral part of the tribal college and the surrounding communities they serve and they promote lifelong learning and literacy in the community.

The Widening Horizons of Information Audit

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Abstract: In recent years, information audit (IA) has widened its horizons of application, moving out and beyond the Library and Information Services (LIS) space into the wider world of enterprise information management. Initially created and subsequently developed by LIS professionals, the information audit provides a methodology and processes that can be applied to assess and improve the management of information across an organisation - provided it is properly understood and correctly implemented.
In broadening its area of activity and influence, information audit contributes to other established audit functions. These include financial and internal audit, and audit activity in the quality, safety and security areas of the organisation. This paper positions the information audit within the wider environment of enterprise audit

functions and enterprise information management.
The paper presents the information audit within a research context, and discusses: methodology and processes; the skills required to conduct an information audit; the outcomes that can be expected in terms of the individual and the organization; the relationship between information audit and other audit functions; the implications of information audit on governance, leadership and regulatory compliance; and the role of the information professional in the information audit function of the future.
Keywords: Information audit, Information management

'The Willing Women are Standing Waiting Now': British Women, the Second World War, and the Women's Library at the London School of Economics and Political Science

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Abstract: This paper summarizes research conducted at the Women's Library at the London School of Economics and Political Science on primary resources that document the first-hand wartime experiences of British women during the Second World War (1939-1945). Selected published and unpublished archival materials highlight diverse accounts of life during wartime that are relevant to current scholarship in women's history, social sciences, political science, library science, military history, and other related fields. British women's wartime experiences are represented in press clippings, newspaper articles, professional and amateur photographs, collections of personal papers, recorded interviews, and other ephemera. Key resources include albums of newspaper clippings and photographs, the personal papers of Marjorie Hayward, O.B.E. (1905-1974), the personal papers of Teresa Billington-Greig (1877-1964), and interviews from the BBC's *Out of the Doll's House* documentary project. Additionally, this paper discusses the possibility for these materials to expand knowledge of existing women's wartime narratives. Potential use and application for these resources in future research are proposed. This paper assists librarians, archivists, and other researchers in better understanding some of the key materials related to British women's wartime experiences that can be found in the collections at the Women's Library.

POSTERS

Business Intelligence Tool for the Management Improvement

Lovisa Cottrell and Anne Järvinen
Stockholm University Library, Sweden

Abstract: With our contribution to the conference we want to describe how we have gone from an expensive and complicated method for operational planning into a simple and budget-friendly model. We were drawn into the trend to utilize a business intelligence tool to handle the tasks of producing an overview, documentation and reporting.
In our poster we want to present our naïve hopes and miserable failure. We wish to present why this attempt failed and the insights won.
Furthermore we will describe how we went back to basics and created a structure based on existing ways of working. The aim is to benefit from what we have already done with a common template and a uniform approach. The purpose of the model is to provide support for improvement – shifting focus to that, rather than monitoring. It can be used in any context, both specific projects and ongoing operations.
We hope to evoke discussion concerning the balance between usefulness and the limiting and regulating nature of management tools.

The Digital Future of K-12 Education: The Role of the School Librarian

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Abstract: Schools are making the move to digital textbooks and other digital resources as the primary learning materials in the classroom (LEAD, n.d.), and there is a need for a school-based professional to foster digital literacy among teachers and students to support this move (Mardis & Everhart, 2013). Because school librarians often deliver on-site professional development for new technologies (Everhart, Mardis, & Johnston, 2010), they have the opportunity to help classroom teachers and students become innovative and literate users of digital resources. Central to the implementation of digital resources is teacher preparedness to use them.
Underpinning the digital literacy educators require to shift to digital resources is the information literacy they require not only to recognize when they have an information need, but also to be able to find that information and to evaluate it and use it effectively (ACRL, 2011). Due to their training both as educators and as information professionals, school librarians are well positioned to assist both students and teachers in acquiring information literacy skills. As such, it is important to understand how prepared school librarians perceive themselves to be to assist in the integration of digital learning resources. In Florida, this process has been mandated by Florida statute 1006.29(3): "beginning in the 2015-2016 academic year, all adopted instructional materials for students in kindergarten through grade 12 must be provided in an electronic or digital format" (The Florida Legislature, 2015). This statute reflects the ongoing move to digital curriculum in the United States (LEAD, n.d.).
The proposed poster illustrates mixed methods research which quantitatively assesses the technology leadership skills of Florida school librarians through an established

survey instrument, and qualitatively explores the factors that affect school librarians' ability to enact those skills through follow-up interviews.

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Explore General Public's Perceptions of Data Mining: A Pilot Study

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Abstract: With the development of information technologies, data and information increase rapidly, and they are shared much wider and faster than before. To explore the internal relationships and patterns of data, a new concept, data mining, was proposed by researchers. In recent years, since the applications of data mining grow, general public pay more and more attentions on this concept. As the biggest online encyclopedia, Wikipedia is built and viewed by millions of ordinary users (not researchers) every day. This feature distinguishes it from academic information sources, and makes it a popular information source that reflects general public's perceptions and focuses. The purpose of this study is to investigate general public's understandings and interests of data mining.

In this paper, 43 entries which relate to the data mining entry were collected from Wikipedia. The text of all the entries was extracted, and the term frequencies of each entry were counted. Then a 43 3492 Document-Term matrix was formed, and it was analyzed by hierarchical clustering and Principal Component Analysis (PCA). Three categories of the 43 entries were obtained by hierarchical clustering: "concepts of data mining", "methods of data mining" and "applications of data mining". The results of PCA show that the methods of data mining include five primary groups: "general data analysis methods", "predictive methods", "analytics", "machine learning methods" and "decision making methods". Meanwhile, the applications of data mining cover "security issues", "medicine and biology" and "other application domains". These findings reveal that general public put attentions on concepts, methods and applications of data mining. In addition, among the diverse applications of data mining, the applications related to security issues are most attractive to general public.

Harry Potter around the United Kingdom: Sites and Collections

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Abstract: This poster aims to highlight a few of the key sites and collections around the United Kingdom related to the Harry Potter books and movies, including two

locations in Edinburgh: The Elephant House, one of the sites where J.K. Rowling worked on the first book, *Harry Potter and the Philosopher's Stone*, and the Balmoral Hotel, where she completed the last book in the series, *Harry Potter and the Deathly Hallows*. Other key sites featured in the books and movies include Kings Cross Platform 9 ¾ and the Millennium Bridge in London and locations within the University of Oxford Bodleian Library and Christ Church College. Two of the richest collections of materials related to the Harry Potter series and author J.K. Rowling are located at Warner Brothers Studio at Leavesden and the British Library in London. AS these books are studied by scholars of children's literature as well as popular culture, it is important to document the major sites and collections related to the creation of the books and movies.

How to Make Parallel Publishing an Established Practice in the Academic Publication Process - A Description of a Process in Laurea University of Applied Sciences, Finland

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Abstract: The aim of this poster is to describe a publication process which supports researchers, encourages parallel publishing and results into an established practice in Laurea UAS, Finland. The poster depicts a new parallel publishing process with researchers and library collaborating in Laurea. Parallel publishing means that in addition to journals, papers are published also in open access repositories. Several funding agencies, including the European Union, recommend Open Access publishing.

Parallel publishing is currently under discussion in Finnish universities and processes are being developed. At the moment parallel publishing isn't as efficient as it could be. The time consuming licensing process and depositing work should often be done by researchers. They might find the process complicated and might not be aware of the benefits of parallel publishing. Due to these challenges many researchers have not placed their work into the institutional repositories.

Laurea has created a procedure, which obliges researcher to parallel publishing and supports the researchers by shifting licensing and depositing work to the library. The process has the following steps: after writing the researcher asks possible co-writers for permission to parallel publishing, then fills out a simple electronic form with basic information, and lastly sends the final draft version of the article to the library. Next the library verifies the bibliographical information and checks the permissions to parallel publishing. When the permission is granted, library deposits the final draft to the Open Repository Theseus (Open Repository of Finnish Universities of Applied Sciences).

This process leads to a growing number of parallel published articles, which benefits both the researcher and organization. The process is a prime mover in the national level as it makes parallel publishing an obligatory part of the academic publishing process in Laurea. Most importantly, it promotes Open Access and thus brings the article easily accessible for anyone.

Keywords: Parallel publishing, Open Access

Libraries as Flexible, Collaborative, Informal Learning Spaces (ILS): The Use of a Multi-method Ethnographic Approach to Understand Students' Use and Perception of the Library's Discovery Centre

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Abstract:

Purpose - Digital disruption is creating opportunities to reimagine the role libraries can play as informal learning space (ILS).

Understanding how students use these spaces and what they expect from these learning environments will better inform the strategic development of university space.

Unfortunately, user needs assessment relating to library space is mostly quantitative and rarely relies on studies using multiple techniques to obtain a holistic view of users perceptions and behavior (Given & Archibald, 2015).

Environment - In September of 2014, Carleton University Library inaugurated its Discovery Centre. This space, along with its furniture and technology, was designed to enable users to configure personal spaces to best suit their learning needs.

Design/methodology - This study examines the lived experiences and perspectives of students using this non-traditional library space.

Data was collected in the Discovery Centre throughout 2015 using a combination of three "**in-situ"** methods: direct ethnographic observation, spot individual and group interviews of students, and one-on-one interviews of staff working in the Centre.

1. Ethnographic observation

Observational sessions were conducted over a period of a year by the same observer. During the spring semester, two additional ethnographic observers collected data. Each observer was asked to write about their view of the use and value of the Discovery Center prior to starting their observational sessions.

2. Group/individual "in situ" spot interviews

Students were asked about their use and perception of the Discovery Centre.

3. Staff "in situ" interviews

Staff working in the Discovery Center were asked about their accounts and perceptions of use of this space by students.

Originality/value - From the preliminary analysis of the data, a number of themes emerged relating to daily, weekly, term behavioral cycles to more focused themes relating to disciplinary differences, group dynamics, noise optimization, furniture preference, technology usage for collaboration. In addition, the frequent positive feedback received by students during interviews validates the use of this inclusive approach in providing a more complete understanding about value students place on these informal spaces for learning.

Public and School Libraries in the Florida Panhandle: Straddling the Digital Divide

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Abstract:

Problem Statement

Broadband in the Florida Panhandle. Investment in Florida's Broadband has been growing steadily since the early 2010s (Broadbandnow, 2015). However, there are pockets of limited or no access to Broadband that still exist in the Florida Panhandle (Broadbandnow, 2015). Additional research into the quality and quantity of Broadband access in these rural areas is needed to highlight how rural young adults can be better served by their public and school libraries.

Library services for rural youth. Rural librarian and rural young adult patrons have received little attention in LIS scholarly literature. This is unfortunate since the majority of libraries in the U.S. are in small and rural communities (Swan, Grimes, & Owen, 2013). More research into library services of rural communities is needed to better understand the current status of rural library services for youth and what improvements should be made.

Research Questions

With this background in mind, the research questions for the proposed study are as follows:

RQ1: What is the extent of Broadband access in the Florida Panhandle area?

RQ2: How are Florida Panhandle youth impacted by this level of access?

RQ3: How are public and school libraries in the Florida Panhandle designing youth services in light of this level of access?

Methodology

The proposed poster illustrates mixed methods research which quantitatively assesses the current level of Broadband access for public and school libraries in the Florida panhandle, and what services they offer that might bridge the Digital Divide for youths in rural communities who do not have home access to Broadband. This will be accomplished via the use of a survey instrument. Follow-up interviews will qualitatively explore the factors that affect access and services.

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Social Support for Autism Patients and Caregivers: Is the Q&A Forum Helping Users?

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Abstract: Autism spectrum disorders (ADS) have become an important public health concern and are the second most common serious developmental disability after mental retardation/intellectual impairment. For autism patients and their relatives, the World Wide Web is apparently the most frequently used way to obtain autism-related information (Mansell & Morris, 2004). The open social Q&A discussion forums provide an efficient platform to autism patients and their relatives where they can ask for help and advice from other users, make contributions to others, receive assistance from the forum, and share their experiences in the community.

This study centres on the investigation of user behaviour patterns and user-oriented term use patterns regarding autism based on the analysis of logs from a social Q&A

forum. A mixed research method was employed to recognize the term use patterns of forum users, reveal consumers' interests and attention related to autism, and discuss how term use patterns revealed from patient-authored texts can assist in training classifiers from the consumer's perspective instead of medical-oriented term classifications.

In this study, the authors collected the log data from Yahoo!Answers. The average number of words in questions is much higher than the average number of words in common search queries which suggests users can express more details through asking questions. Moreover, the average number of words in responses was significantly higher than that in questions which reflects the strong enthusiasm to provide support to others. With the analysis of high-frequency terms, the importance of online health communities as a venue for health information seeking as well as for social and emotional support emerged, and researchers will incorporate both aspects into future studies.

Keywords: Autism; Q&A; social support; question and answer forum; health informatics

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Students say the darnest things!

Dr. Adwoa Boateng

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Abstract: Atlas.ti software was introduced to librarians by Dr. Boateng at a university campus, where NVivo, SPSS and quantitative designed surveys are more commonly utilized. Traditionally the librarians conduct information literacy classes which are requested by faculty for undergraduate and graduate students. The students are taught how to use library resources to improve their information research, citing and writing skills.

- The purpose of the project was to introduce to the librarians another way of analyzing what students remember the most after attending class.
- During a 2014 semester, an online survey was drafted and randomly used by the librarians during their information literacy classes. This was a voluntary project which focused on demonstrating the benefits of using Atlas.ti. 267 (67 online, 206 paper) surveys were collected from more than 11 classes.

Dr. Boateng demonstrated uploading survey text into Atlas.ti, tagging data using the grounded theory coding method in order to analyze the data. This project provided an opportunity to explore the benefits of qualitative data analysis which can be used in making decisions on enhancing future class instruction services.

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