

BOOK OF ABSTRACTS

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International Conference

QQML 2020

Turned into Virtual



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Preface

Dear Friends, Dear Colleagues,

It is our great pleasure to welcome all of you in 12th QQML International Conference, our 1st Virtual Conference.

Dear Colleagues,

We were deeply concerned for the coronavirus development in connection to the conference activities and that the World Health Organization declared it a global pandemic. We were quite sensitive to that constraint but equally determined to fight against the difficulties that emerged. We are in front of the new challenges, a new historical frame, new conditions of life.

In these conditions, and following many requests, we have turned the conference to Virtual Conference. But, the basis of the QQML Conference series remained unchanged.

Important speakers present online their research and their work in the Plenary Speeches, the Workshops, the Special Sessions and the Posters which support the professional development of library scientists and information specialists and link research output to theory, practice & policy. The conference also brings together online members of the QQML network that started some years before.

Delegates from 51 countries participate here: Austria, Bangladesh, Belarus, Brazil, Bulgaria, Canada, Colombia, Croatia, Czech Republic, Estonia, Finland, France, Germany, Ghana, Greece, Hungary, India, Iran, Israel, Italy, Japan, Jordan, Kazakhstan, Mexico, Nigeria, Norway, P. R. China, Pakistan, Philippines, Poland, Portugal, Qatar, Republic of China (R.O.C), Romania, Russian Federation, Saudi Arabia, Serbia, Slovakia, Slovenia, South Africa, Spain, Sweden, Taiwan, Republic of China (R.O.C), The Netherlands, Turkey, Uganda , UK, Ukraine, USA, Uzbekistan.

I'd like to thank the Committees of the Conference which worked hard for its success.

Enjoy it!

Anthi Katsirikou

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Plenary Talks

Glòria Pérez-Salmerón

Diputació de Barcelona, Stichting IFLA Global Libraries Foundation Chair,
Spain

Plenary Talk: Cultural Heritage Organisations as Assets for Sustainable Development

Abstract: In a global world like is our nowadays' world, access to information via Cultural Heritage Organisations acquires new requirements to achieve. Librarians we have to suit our role as the main players to guarantee the safeguard of heritage collections and its meaningful access to the description of the information they contain. Librarians should work on the new social context effectively and giving answers knowledge as society's information demands require nowadays. Libraries contribute to human development if we align ourselves with the Sustainable Development Goals this is the way to serve common goals and keep guarantee the future positioning of libraries, safeguarding Heritage Collections and contributing to our society's development. Governments have to consider libraries as motors of change, an investment to achieve local sustainability and contribute empower literate, informed and participative societies to global development.

1

Brief Biography: *Glòria Pérez-Salmerón is the Stichting IFLA Global Libraries Chair, IFLA immediate Past President 2017-2019. She was also the President of FESABID, Federación Española de Sociedades de Archivística, Biblioteconomía, Documentación y Museística (Spanish Federation of Archives, Libraries, Documentation, and Museums) since April 2018, and member of the Executive Committee and Vice-President of EBLIDA, European Bureau of Library Information and Documentation Associations (2008-2015). Gloria works at Diputació de Barcelona in the Libraries Department as a Senior Consultant, and she is Counsellor of the Instituto Brasileiro de Informação em Ciência e Tecnologia. She has held many leadership roles in her distinguished career including Director of the National Library of Spain (2010-2013) where she also was a member of its Governing Board and Executive Committee (2008-2013). Under her management, the Library developed many innovative projects including the systematic digitalisation of holdings, thanks to a partnership agreement with Telefónica, which foresaw the digitalisation of 200,000 book titles; and the promotion and approval of a new Legal Deposit Law, including the collection of electronic resources and the internet archive. Gloria's involvement with IFLA is long-standing, being a former member of IFLA's Public Libraries Standing Committee (2005-2012).*

Caroline Bassett

Professor of Digital Humanities, University of Cambridge, UK

Plenary Talk: Digital Humanities: What Does it Need to Be?

Abstract: Digital Humanities has never been a settled thing. There may be US and European origin stories about what it was, or how it was supposed to be. But it has always morphed, moved along with critical priorities, the possibilities for funding, the development and explosive spread into everyday life and cultures of the technologies that underpinned it. Today DH might be central to the future of ‘the humanities’ in an age when they seem threatened by the rise of solutionism and instrumentalism. But is that because it produces an alternative way of understanding new forms of knowledge production to the standard industry offerings? Or because it lines up with what the market wants? In this talk I want to suggest that DH is powerful because it can map across divisions universities are bad at breaking down; those between libraries and faculties for instance. DH is magpie like, it takes what it needs. In this talk I ask what it does this for, and what it gives back. In whose interests does it do its work, what kinds of results can it produce, what does it need to be?

2 ***Brief Biography:** Caroline Bassett is Professor of Digital Humanities at Cambridge. She writes, researches and teaches about digital change and epistemic, cultural, and social transformation. Recent writing has explored critical theories of technology, media histories, new behaviourism, digital humanities and intersectional feminism. She is director of Cambridge Digital Humanities (CDH), a new research project at the University. Her latest book is Furious (Pluto, 2020), co-authored with Sarah Kember and Kate O’Riordan.*

Kristel Veimann

Director of Library Services, National Library of Estonia

Plenary Talk: To Improve is to Change: Service Based Organisation and Change Management in the National Library of Estonia

Abstract: Today, when all processes, service models and technological solutions are changing rapidly, memory institutions are constantly trying to find the best solutions to adapt, survive, perform and influence. How to better understand what we can do or what we should change to improve our ability to perform and to keep us relevant? The National Library of Estonia is today working as a service based organisation, where the organisational model is based on matrix management leading ideas. The service based organisation follows its mission, vision and strategic goals, its everyday work

aims to create value for its target groups, and the organisation regularly analyses the efficiency of its activities by linking these activities to expenses.

In rapidly changing environment, the most important thing is to recognise the importance of breaking down silos to help people collaborate across boundaries. Vertical relationships, horizontal collaboration and goals and targets can help answer the main question „What is most important for creating value for customers?“. One way to break down silos is to redesign the formal organisational structure. It could be confusing, and slow, but it could be also very productive. A service based organisation operates on the basis of the following principles: The aims of the services have been defined and the service-related information has been reviewed and organised; The services have been described and the cross-organisational shared responsibility has been established; The service measures as well as the procedures of measurement and analysis have been determined; The required data set, knowledge base is available for managing the services; The service-focused process for managing change has been established; The continuous process of improving services is in operation.

The main idea is to use these cornerstones as performance management system ideas and change management attitude communicated through the organisation's vision, mission and values to all its employees. Performance management is mostly about measuring and enhancing the performance of staff, asking always questions Why? How? And How much all this costs?. But for asking these open questions and to find answers we first need to change our organisation's mindset. To understand that measuring something within an organisation can increase the importance of services and also make clearer the understanding of strategic goals – what are the methods we use today and how assessment and measuring could change the organisation's mindset. One of the more challenging steps in the organisational assessment process is to find out what indicators (quantitative and qualitative) and what methods to use to assess our performance. The Plan-do-check-act (PDCA, Deming) cycle is the basic formula how the National Library of Estonia is keeping strategic planning, services assessment, goals setting and performance measurement working as all year timeframe. Considering the services, the organisational maturity in the National Library of Estonia is evaluated on the basis of the Capability Maturity Model (CMM). This model enables to assess which level is currently aimed to be achieved or between which levels the organisation is positioned.

How do the principles and management model of a service based organisation help organise everyday processes and activities? How do they also, when linked with the ideas of service design and design thinking, assist the organisation in producing new creative ideas and finding inspiration to develop user-centered services based on client values? These are the questions we are seeking answers to.

Brief Biography: *Kristel Veimann is the Director of Library Services in the National Library of Estonia. This position requires skills and knowledge to manage various functional areas of the whole organization. She coordinates and supervises the services and service providing processes in the library, the development and management of both the traditional and e-services of the library, as well as collection development and long-term preservation of the library's collections. Kristel is also responsible for the development of the related policies and strategies in the National Library. Her duty is to supervise the training of the personnel, set up and evaluate the objectives of the performance, initiate different projects which addresses the changing needs of the clients, as well as to support National Library's strategic plans. She is a*

member of the Standing Committee of IFLA National Libraries Section and head of the Innovation Working Group at the Estonian Librarians Association.

WORKSHOPS

1. 3D Printing Services in the Libraries

Angela Repanovici, Transilvania University of Brasov, Romania

Abstract: The young generation is very accustomed and needs the use of new technologies, including 3D Printing, almost every day. Education plays a key role in building creative minds, in developing senses, curiosity by stimulating experiences. Currently the educational system in the entire world follows the approach DIY (Do It Yourself), allowing the students (even if they have certain impairments) to explore and develop their innovative skills by creating and working based upon their own imagination, being encouraged by modern technologies.

Basically, 3D printing at a larger scale may be used to create for educators, teachers, pupils and students a favourable environment for applying more effective ways of teaching, learning and understanding of various concepts expressed by help of 3D models.

We want to develop tools to have qualified librarians for using 3D printing, a service offered in libraries and to be able to train the users. In this workshop we will present and analyse best practices to organise 3D printing services in libraries.

5

2. “Precision Library Services”: The World Bank Group Library Experience

Eduardo E. Quintero Orta,

Integrated Reference Desk and Interlibrary Loan Services Team Lead and Research Librarian at The World Bank Group Library, USA

Abstract: The World Bank Group (WBG) Library serves a community of around 16,000 staff, located in headquarters in Washington DC, USA and in over 150 Country Offices globally. We answer over 4,000 questions per month and deliver dozens of training sessions every year. The WBG Library offers access to over 100 databases and thousands of e-journals for staff. The WBG research agenda spans from Agriculture to Water and everything in between. The WBG Library manages to deliver the right training, provide top-notch reference and research services for this vast and robust research agenda and, at the same time, maintain the collections and access to databases while staying on top of new trends to foresee the future potential research interests. How we do this is what we will explore.

“Precision Library Services” is an inspiration from the Precision Medicine’s principle. And what is precision medicine? According to the Precision Medicine Initiative, precision medicine is “an emerging approach for disease treatment and prevention that

takes into account individual variability in genes, environment, and lifestyle for each person." This approach allows doctors and researchers to predict more accurately which treatment and prevention strategies for a particular disease will work in which groups of people. It contrasts with a one-size-fits-all approach, in which disease treatment and prevention strategies are developed for the average person, with less consideration for the differences between individuals.”

(U.S. National Library of Medicine)

<https://ghr.nlm.nih.gov/primer/precisionmedicine/definition>

Inspired by this concept, we have found a successful and systematic way to a) Ensure visibility, b) Increase the proper usage of the library resources, c) Satisfy our Library clients' needs and d) Report Key Performance Indicators to our top management, by capturing, compiling, analyzing and utilizing different datapoints. These indicators include individual patron's data and statistics provided by vendors or those captured by our proxy servers. This data, combined by our Library Team's experience fuels the different strategies and paths to more precisely provide the right service and timely pertinent training, to the right targeted-client, just as the Precision Medicine does with patients and their treatments.

This session will go more deeply into our processes, strategies, experiences, achievements, lessons learned and next steps.

Target audience: Library professionals.

Number of participants: Guestimate 25-30

Timeslot: approximately 1.5 hours, including Q&A

Keywords: data analysis, client-centric library services, library training and outreach, library strategy, library key performance indicators

SPECIAL SESSION

Bibliometric and Scientometric Research

Coordinator: **Teresa S. Welsh**, Ph.D., University of Southern Mississippi, USA

Scope & rationale: Bibliometrics, literally ‘the measurement of books’, is the analysis of publication patterns, impact, usage (including circulation statistics), or content of professional or scholarly literature in a variety of formats, including websites or web resources (webometrics). The related term ‘scientometrics’ (the measurement of science) is more specifically the statistical analysis of scientific research literature. This session includes presentations on a variety of bibliometric research and formats.

Paper

A Bibliometric Study of Scholarly LIS Literature Related to Collection Analysis/Evaluation, **Teresa S. Welsh**

ABSTRACTS

4 Steps to Curriculum Mapping

Paschalia Terzi

Instructional Librarian, Georgetown University in Qatar, Qatar

Abstract: Increasingly academic libraries are undertaking curriculum mapping projects across the world, especially in the US for various reasons, some of which can be summarized below:

- it helps librarians gain a clearer and more comprehensive picture of how the institutions where they are embedded in are pursuing their education goals
- understand the place of libraries in the educational structure, and lastly
- how libraries and specifically instruction librarians can increase their impact in this education process.

For the purposes of this paper, my focus will be on the benefits of this process for information literacy instruction. Furthermore, I will present a 4-step approach organized in discrete parts with the intention to simplify it, especially for librarians undertaking any form of curriculum mapping for the first time.

Curriculum mapping can prove especially effective for big institutions with multiple academic departments that can help librarians understand their complex organizations and pursue information literacy projects with greater rigor. Nevertheless, it is still useful for smaller institutions especially in two cases: when a librarian is newly appointed to her position and/ or the institution's philosophy might be a novel one for the librarian. Curriculum mapping then can help the librarian to become familiar with their new institution and its practices.

For the above reasons, it helps if curriculum mapping is overtaken in a consistent manner. Content analysis of documents relating to the institution's curriculum structure should be overtaken. Examples include the officially approved vision and values of the institution, the learning objectives of the majors and specific courses etc. On a more detailed level, syllabi of courses, and previous information literacy lesson plans, if available, should be included. Adding to this, interviews with stakeholders and gatekeepers relating to the creation and use of the curriculum should be conducted, for example with deans and faculty members.

There are various types of software, apart from specialized mapping software, that can be adapted for this task. Software that can help create simple flowcharts, like software used for presentations, can be of great help. Other types can include software to create vector graphics because they allow for infinite zooming that can help adding layers of detail. For the goals of this paper the free version of an online mapping tool was used, called 'Mindomo' that is mentioned also in the literature.

Combining the results of curriculum mapping of the institution with standards of information literacy in the disciplines, and even expanding to other forms of literacy like media and digital literacy, will give a horizon of possibilities for teaching new skills to students. With the help of curriculum mapping these skills can be scaffolded across the curriculum and expressed as learning objectives with increasing complexity and depth.

Ultimately, curriculum mapping can be used by instructional librarians as a tool to promote information literacy instruction to stakeholders, that can take various forms, both as class and online instruction.

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9

The Academic Educational Environment as Influence Factor in the Creative Industry

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Abstract: In this study, we present the University as an institution and space for development, which in the right context can be well received by young people. In most cases, the creative industries introduce the University as a place where young people discover themselves and learn truths about family, friends, relationships, success and other aspects of life. The university of contemporary TV shows and

movies most often teaches life lessons more than specific knowledge and skills. We are trying to present the academic educational environment as a influence factor in the creative industries, through which factor the riches of humanity also function as preserved and carried cultural values. The new age, starting from the 19th century, but 20th century especially, has been fascinated by the value of "creativity" (from one point onwards perhaps by the passion for creativity): for the production of "new", for "authorship", opposing to "discipleship" and "succession"; for "development" and overtaking as opposed to conservation; for the production (of oneself) of knowledge as opposed to the construction (of oneself) for knowledge.

The methodology we use includes: information approach; contextual modeling; Case Study; search and analysis of factual information. The aim of the scientific research is to present the project "Communication Model of Interactive Educational Environment for Continuous and Postgraduate Vocational and Continuing Training in the Field of Cultural and Creative Industries" № DN 05/1 of 14.12.2016, emphasizing the cultural and creative industries and institutions and their connections and relationships with the academic educational environment.

Modern creative industries largely define public perceptions of values, professions, institutions, emotions, and many other aspects of life.

This influence extends itself beyond USA, spanning much of the world, including Bulgaria. In contrast the university with its peculiar "liturgy" intertwined in its very idea, and in modern times, remains to some extent a "Castalia": an institution of greater service to the spirit than to creativity; to the worthy carrying of the spiritual more than to "mastering" it and to "knowing" it. A place, at least by design, of not exactly perfect "knowers" (experts), but of people who are built and continue to build themselves so they can spiritually "carry" this on its own merits.

Keywords: academic background, creative industries, cultural values, contextual modeling, case Study, knowledge, educational environment

The Academic Library and LGBTQ Students: A Survey of Librarians and Library Administrators at LGBTQ-Friendly Colleges and Universities in the United States

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Abstract: LGBTQ students are a growing and more visible demographic than ever before and they uniquely at risk in terms of their personal, physical, and psychological health. Academic libraries have begun to outline specific services for this student demographic in efforts to position the library as a partner in students' academic success and wellbeing. Since 2007, the Campus Pride Index has offered college-bound students and their families one reference for the LGBTQ-friendliness of colleges and universities across the US. Participating schools self-assess their campus culture in eight areas: LGBTQ policy inclusion, support and institutional commitment, academic life, student life, housing, campus safety, counseling and health, and recruitment and retention efforts. Using the list of 25 best LGBTQ-friendly colleges and universities, the researchers collected names and emails for

librarians and library administrators whose titles or responsibilities included public services or outreach, or were liaisons to Gender, Women and/or Sexuality Studies departments or LGBTQ groups. The survey attempted to gather perceptions regarding the following:

- What is the role of academic librarianship in supporting at-risk groups, such as LGBTQ students;
- How do libraries communicate their “LGBTQ friendliness”?
- Do they offer accommodations appropriate for LGBTQ students;
- Do they require or encourage staff to attend LGBTQ-related training and programs;
- Are there any specific safety procedures in place to protect LGBTQ students;
- How are library roles and responsibilities changing in the next 5-10 years in regard to support for at risk groups, such as LGBTQ.

This presentation will describe the survey’s methodology and key findings. The authors of the study will discuss the inherent ethical and logistical challenges of collecting data on LGBTQ students and the difficulties in finding information that is specific to academic libraries. The results provide a guide for designing and developing future library services to LGBTQ students.

Keywords: LGBTQ students, survey research, academic libraries

Access to Academic, Professional and Leisure Materials in University Libraries in Benue State

11

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Abstract: The study investigates access to academic, professional and leisure materials in university libraries in Benue State. The purpose of the study was to determine the forms of access given to academic, professional and leisure materials in university libraries in Benue State. This study adopted a survey research design. The area of study was Benue State. The population of the study was 5,753 of the libraries under study. The total sample of 374 was drawn for the study. Data was collected through observation checklist and questionnaire. Data collected was presented in tables and analysed with the use of descriptive statistics such as frequency count, and mean and standard deviation. The decision point was 2.50. Any item that scored 2.50 and above was accepted and any item that score below 2.50 were rejected. The study found that textbooks, books of readings, monographs, conference papers, working papers, thesis, advertisement, visual materials, newspapers, magazines, novels and plays are the academic professional leisure materials available in University libraries in Benue State. Users get access to these materials through the internet, library catalogue, library staff, OPAC, handwritten and printed and bounded index. The form of access given to these materials is open access, closed access, online, dual access as well as partial access. The study identified these problems as lack of knowledge about the existence of the materials. It is recommended that library staff should assist users in accessing their resources. It is concluded that users get open access to academic, professional and leisure materials in university libraries in Benue State.

Keywords: university libraries, access, academic materials, professional materials, leisure materials

Accurate Identification and Measurement of Sci-tech Poverty Alleviation Objects Based on Library in China

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Abstract: This paper aimed at the overall goals and tasks of poverty alleviation by science and technology in China, and investigated the needs of poor areas and farmers for sci-tech assistance. According to the potential ways of libraries to improve the scientific and technological capabilities of poor areas and farmers, this paper constructed a set of index systems that supported the sci-tech poverty alleviation by Chinese libraries with five dimensions of “education”, “medical care”, “industry”, “personnel”, and “management”. Then, this paper used the Alkire-Foster method to identify and measure the needs of Chinese libraries for sci-tech poverty alleviation, and conducted empirical research using the Qin-Ba Mountain poor area as an example.

The results showed that multi-dimensional sci-tech poverty was still widespread in China's impoverished areas, especially in the two dimensions of industry and personnel, which contributed the most to the sci-tech poverty index. What's more, the proportion of people deprived of science and technology in three dimensions accounted for nearly 35%. As the dimensions of sci-tech poverty increased, the degree of sci-tech poverty continued to deepen. Finally, according to the deprivation of different dimensions of sci-tech poverty, this paper further proposed the sci-tech precision poverty alleviation path, strategy and management mechanism to promote the improvement of sci-tech capabilities of poor farmers in China, and promoted the development of science and technology in poor areas.

Keywords: sci-tech poverty alleviation, library, accurate identification, multi-dimensional measurement, China

12

An Analysis of Hikikomoris “Hidden” Information Needs on an Online Discussion Forum: Applying Dervin’s Sense-making Metaphor to their Text-based Self-narratives

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Abstract:

Introduction: Recently scholars of information science have started to conduct research on information needs of hikikomori aka. socially withdrawn people in a text-based online message board (Hassio&Naka, 2019). In LIS field however there is a lack of a methodological application as well as an analytical technique for this emerging research object. This paper demonstrates an applicability of Dervin’s sense-making metaphor (Dervin, 1992; 1999) combined with narrative analysis tool as an analytical technique for identifying hikikomoris information needs and their problematic situation articulated in their self-narratives in a text-based online message board.

Method: Based on dataset consisting of 200 threads containing 60,000 messages posted from previous study (Hassio&Naka, 2019), a sample of two cases on problematic situation was selected for this empirical study. Cases were analyzed using both structural and thematic narrative analysis tool combined with Dervin's two sense-making metaphor: the sense-making triangle of situation-gap-use and gap-bridging metaphor.

Results: Structural narrative analysis revealed that several units in which each consisted of situation and gap were developed the process of the transition of several information needs as a narrative continued. Thematic narrative analysis on the other hand revealed that gap-defining and gap-redefining occurred within poster's self-narrative, which implied that there may occurred a qualitative change in cognition of gappy situation.

Conclusion: This study demonstrates that Dervin's sense-making metaphor become a useful analytical technique when the metaphor is utilized with a narrative analysis tool for identifying of hikikomori information needs and their problematic situation expressed in their self-narratives. Especially study shows evidence that a combination of gap-bridging metaphor and thematic analysis become more powerful for identifying a qualitative change of gappy situation that occurs in speaker's cognition.

Keywords: hikikomori, information need, sense-making, narrative analysis, self-narrative

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Analysis of Information Needs for World Health Organization Publications among Users of WHO Documentation Centre Website

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Abstract: The WHO Documentation center website: <http://whodc.mednet.ru/> has been in operation since 2009 and posts WHO publications on a regular basis. The website automatically counts the number of views of publication abstracts and their downloads through links to the original WHO and WHO/ Europe websites available at the WHO DC website. The download is open access. Therefore, analysis of views and downloads of publications can objectively reflect information needs of the website users.

Purpose: to analyze information needs of the WHO DC website users for WHO publications with a breakdown on topic, year of publication, type and language of publications.

Methods: statistical, bibliometrics and content analysis

Objects:

- To analyze views and downloads of WHO publications by health topics;

- To analyze views and downloads of WHO publications by type;
- To analyze views and downloads of WHO publications by year of publication;
- To analyze views and downloads of WHO publications by language;
- To understand why some topics and publications are more popular among our users

Results: as of December, 10th, 2019, there are 2016 documents in 114 topic categories available on the WHO DC website. The analysis included publications with over 1000 downloads on that date. The analysis showed that the most actively used categories include the following: health systems; children's health; health and environment; health care organization, management and financing; prevention; health personnel; health assessment and statistics.

By type of publication, guidelines, analytical reviews and reports by WHO and WHO/Europe on various topics predominated. As to year of publication, the analysis identified a number of documents published in 2015-2018, which by the time of the study had already had over 1000 downloads. Overall, documents with the highest download rates were published in 2012-2014. Since the website is targeted at the Russian-speaking users, publications in Russian account for the majority of views and downloads (54%). The absolute leader is a historical overview to commemorate one of the Directors of the WHO Regional Office for Europe: Jo Eirik Asvall's memorial guide 1931-2010. - WHO Regional Office for Europe, Copenhagen. 2012 with a total of 124747 downloads as of December 10th, 2019.

Thus, the analysis helped to identified topic areas our users are most interested in, as well as type of publications and language that are in highest demand among the Russian-speaking users of WHO DC website.

Analyzing Open Access Impact to Learning Spaces

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Abstract: The Journal of Learning Spaces, <http://libjournal.uncg.edu/jls> (JOLS) is an open access journal published by the University Libraries at the University of North Carolina at Greensboro since 2011. This journal is free for authors, subscribers and related contributors, published on an open platform hosted by the libraries and staffed with volunteers from a broad interest group to complete peer review, copy editing and layout duties. The journal has published an average of 8+ pieces a year which includes research manuscripts, position pieces, case studies and reviews.

The goal and purpose of JOLS is to publish scholarship related to all aspects of learning space design, operation, pedagogy, and assessment in higher education. Since the beginning, the Journal of Learning Spaces has provided an international forum for research and case studies related to how space contributes to learning outcomes. This topic is important to the field because of the quickly changing nature of learning spaces--both physical and virtual--and learning space pedagogy, as well as the increasingly important role of Open Access materials in teaching and learning.

This paper will give an overview of the inception of open access journal production and support at The University of North Carolina at Greensboro, with a focus on the Journal of Learning Spaces. The journal brings together editorial board members and

authors from academic departments, university libraries, teaching and learning centers, student affairs offices, information technology units, and related groups at academic and research institutions around the country and across the world, with the common goal of developing, sharing, and enriching the scholarship of learning spaces. The paper will also discuss roles and skills needed for journal success, challenges involved in the creation of open access resources, and benefits to both hosting institutions and the broader communities of participants and readers.

The analysis of the eight full years of production is focused on a citation analysis, keyword usage and number of views. In this analysis it was also desired to explore the international aspect of the journal as interest has grown anecdotally with more frequent contributions and questions. This also includes discussion of the communities that contribute to and are impacted by open access publishing and how the library as publisher can play a significant role in managing credible content in a free and active environment.

Data gained from this analysis can help inform researchers of the value of open access publishing as well as understanding the differences between for-profit publications encased in advertisement vs. pure research focusing on the non-branding of spaces and products leading to unbiased decision making. This paper bridges between the worlds of physical learning space design and online learning experience, encouraging attendees to expand their knowledge and skills in both realms.

Open access publishing provides value across many disciplines. This paper will provide statistical data that shows the impact and influence that open access publishing can have within the learning spaces genre. Graphs, tables and charts of the analysis are included.

Keywords: learning spaces, citations, word usage, classrooms

Assessing Special Libraries' Strategic Issues: An Analysis from LIS Profession

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Abstract: Dependent on institutional goals of their parent organizations, special libraries are essential information services that serve both to internal and to external users (such as university academic staff, researchers and students).

In order to emphasise the importance of these research centres, this paper aims to revise strategic issues related to special libraries from a professional approach. Methodologically, a qualitative approach was undertaken with special librarians and university academic staff to come to general conclusions from different perspectives.

Keywords: special libraries, strategic actions, professional perceptions

Assessing the Value of Library Resources for Renewal Negotiations

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Abstract: This presentation details the methods used by staff in the Assessment Programs & Collection Strategy and the Acquisitions & Continuing Resources departments throughout 2019 to assess the value of library resources. The University of Tennessee, Knoxville is a Research 1 institution whose library budget has remained flat for the seventh consecutive year. This budget situation, combined with increasing resource inflation and lack of established practices for assessing a resource's value, makes renewal and new resource acquisition decisions difficult. In addition, the Libraries' current strategic plan identified the need to "implement an evidence-based model to inform collection decisions." In response to this goal and the aforementioned budget issues, the presenters adopted a number of measures to assess and inform renewal negotiations for electronic resources and print material. This presentation will include discussion of: quantitative data gathered from usage reports, access issue reports, citation analysis; qualitative data gathered from subject and instruction librarians; default annual cost increase caps; data visualization and analysis using Microsoft's PowerBI; and collaborative decision-making committees. Combining these evaluative methods provided the tools to make evidence-based decisions and strategically use the Libraries' funds. This mix of methods reveals that a multi-faceted approach to the data is needed to provide a comprehensive view of a resource's value.

Keywords: assessment, qualitative methods, quantitative methods, evidence-based analysis, resource renewals

16

Behavioural Trends in the Use of Printed Books or E-books: A Case Study in Portuguese University Libraries

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Abstract: The emergence of e-books as resources of scientific information in university libraries has been imposed at the speed of technology, with advantages such as portability, cost and accessibility, assuming that e-reading is being well received and adopted by library users, who can access scientific information from anywhere. However, recent studies point to the resurgence of paper reading preferences. This study analyses the behavioural trends in the use of scientific information from these two formats: printed books and e-books and the way the academic libraries' users choose to use them. To analyse these trends, an online survey is conducted on a sample of users from various Portuguese higher education schools (Universidade Aberta, Universidade de Lisboa and Universidade do Porto).

The first part focuses on the characterisation of the respondents. These data include gender, area of knowledge, and academic level they attend. In the second part we seek their opinion on the advantages and disadvantages of each medium, frequency of use, choice of medium according to the purpose of reading, devices used, and acquisition suggestions for the library. The results allow us to observe the factors that influence and affect the behaviours of users regarding this choice. Although interesting advantages are observed in the use of e-books, the study is consistent with previous investigations, which indicate that in Portugal there is still a preference of the printed book over the digital one. Studies like these are important to not only support the decision of choosing the information resources to be purchased considering user preferences, but also to outline strategies for promoting the use of various formats that, rather than competitors, should be complementary.

Keywords: e-book, printed book, academic library, Portugal

Best Practices for a Bibliographic Database: Creation, Maintenance, and Sustainability

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17

Abstract: Over the past twenty years, the process and form of scholarly publishing have transformed dramatically. The shift of much of scholarly research to online publication has sparked a cottage industry of products designed to support and facilitate finding, harvesting, storing, and sharing electronic versions of journal articles, papers, reports, books, and other outputs. Platforms like ResearchGate, Academia.edu, and Mendeley now make it possible to aggregate and share research outputs from a disparate collection of electronic resources, including both subscription and open access, with the click of a button. But...is it truly that simple to find, aggregate, and share a repository of research products?

This Best Practices session will describe a small group's efforts to assemble and share a database of bibliographic information related to library assessment, value, and return on investment. The project, begun in 2009 in connection with a research grant funded by Institute of Museum and Library Services (IMLS), the United States' library and museum-focused federal agency, initially began as an annotated bibliography. As team members assembled resources, however, they began questioning if a static document would truly be the most useful model for sharing a disparate and large collection of resources. Ultimately, they abandoned the annotated bibliography model, and in 2011 launched a dynamic database of bibliographic information for over 1000 individual resources. The database has continued to evolve and expand in the ten years since its inception, now incorporating over 4000 resources, diverse in type, discipline, format, and audience. Notably, the team created and added bibliographic records for individual papers and posters published in the Association of Research Libraries (ARL) Library Assessment Conference Proceedings, 2006-2016. As these items have not previously been indexed elsewhere, this represents a significant contribution to the assessment community. In addition to an increase in the number of entries, the database has transformed and improved in a number of other ways, including a move to a new content management system.

Such a large (and lengthy) project invariably presents challenges. The original creators were faced with a number of decisions, including the type of software and tools to use for harvesting, organizing, and presenting the database. The database includes resources from multiple disciplines, downloaded from multiple publisher platforms, requiring the team to create a controlled vocabulary to facilitate search and discovery. And, because the database includes both Open Access and subscription resources, the team had to consider how much information to include for each entry without overstepping intellectual property guidelines. Team members involved in multiple phases of the project conception, creation, implementation, management, and maintenance will describe how they addressed challenges associated with conceiving, creating, maintaining, and adding value to such a large-scale resource. This session will present best practices for such a project, but also provide an honest audit of the challenges, successes, and stumbles we encountered along the way.

Bibliographic Subject Analysis of Fake News

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Abstract:

Introduction: “Fake news” has recently become a trending subject, but first appeared in a 1894 newspaper (McQueen 2019). This paper presents a method designed to reveal scholarly discourse across time and between disciplines by using subject terms extracted from bibliographic databases that were searched using a uniform search query on fake news. The subject analysis reveals how scholars shifted focus on the ‘aboutness’ of fake news for the last 130 years.

Literature Review: There have been comparisons between bibliographic databases regarding scope and coverage of articles indexed in those databases for the sake of measuring research productivity (Yang and Meho, 2006; Bergman, 2012; Harzing and Alakangas, 2016). Martínez-Avila et. al. (2016) and Shah, Mahmood, and Hameed (2017) compared subject representation across databases, and Martín Martín et al (2019) compared citation distributions across 252 subject categories.

This research analyzes related bibliographic database subject headings to reveal the main subjects related to the articles and in order to answer: what have scholars studied when they wrote about fake news, propaganda, and misinformation?

Method: We used a search string¹ in seven subject databases² going back to 1890. The terms and their frequency of appearance were collected from each database, were categorized by the name of the database, and were assigned a time span by decade of publication.

The file was imported into R for statistical analysis (R Core Team, 2018). We use the database and the terms as separate units of analysis. The former provides insight into how disciplines have attended to 'fake news' and related problems since the late 19th

¹ misinformation OR disinformation OR "fake news" OR "false news" OR propaganda

² Databases include: *ABI-Inform*, *Business Source Premier*, *Communication and Mass Media Complete*, *LISTA*, *Medline via Web of Science*, *PsychInfo*, and *Sociological Abstracts*.

century. The latter provides insight into the topics of interest. Time series analysis, not described here, provides insights into how topics shifted across the 130 years.

Findings: We find that fake news concepts have grown steadily throughout the 20th century and have been most present in the biomedical and health literature. Since the late 1890s, 61,942 non-unique fake news related terms have been created across all subject databases (Fig. 1). Terms spiked in the 1930s with the rise of fascism and the start of World War II, and spiked during the first two decades of the Cold War. The number of terms continued to grow throughout the 20th century but sharply doubled again during the 1990s and early 2000s, corresponding with the growth of the internet. Prominent terms during the 1930s include *democracy*, *labor*, and *World War II*, and in the current decade, they include *Zuckerberg*, *minority and ethnic groups*, and the 2016 U.S. presidential election (Fig. 2).

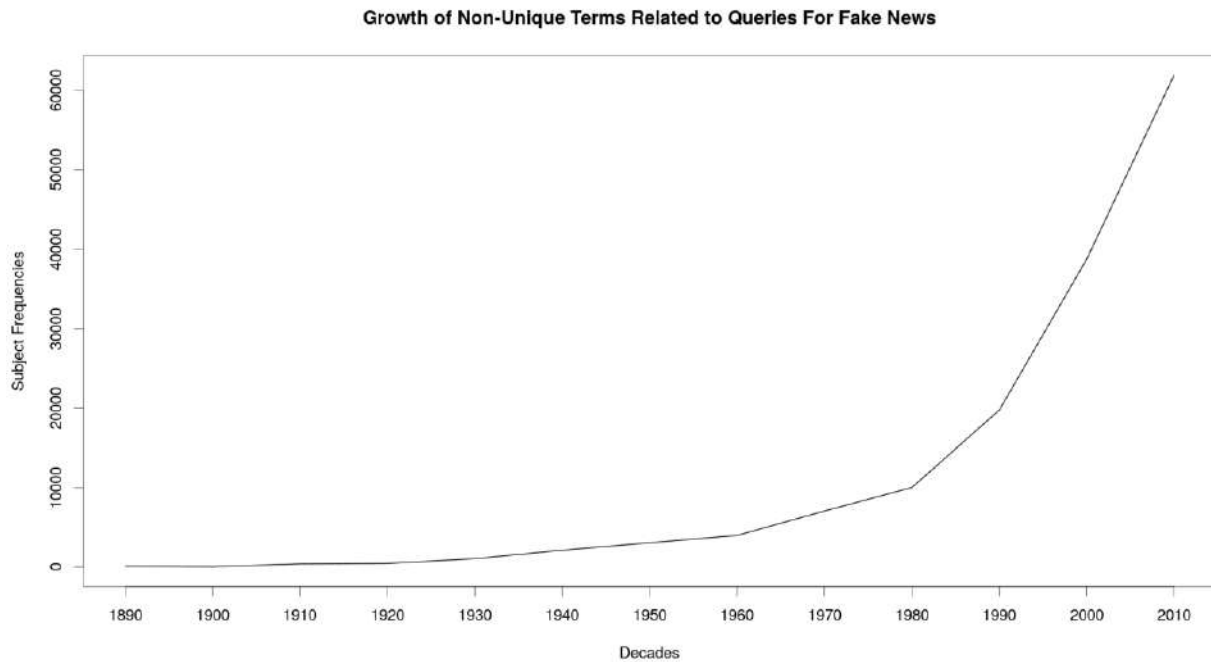


Fig. 1. Growth of bibliographic subject terms related to fake news, from late 19th to early 21st century.

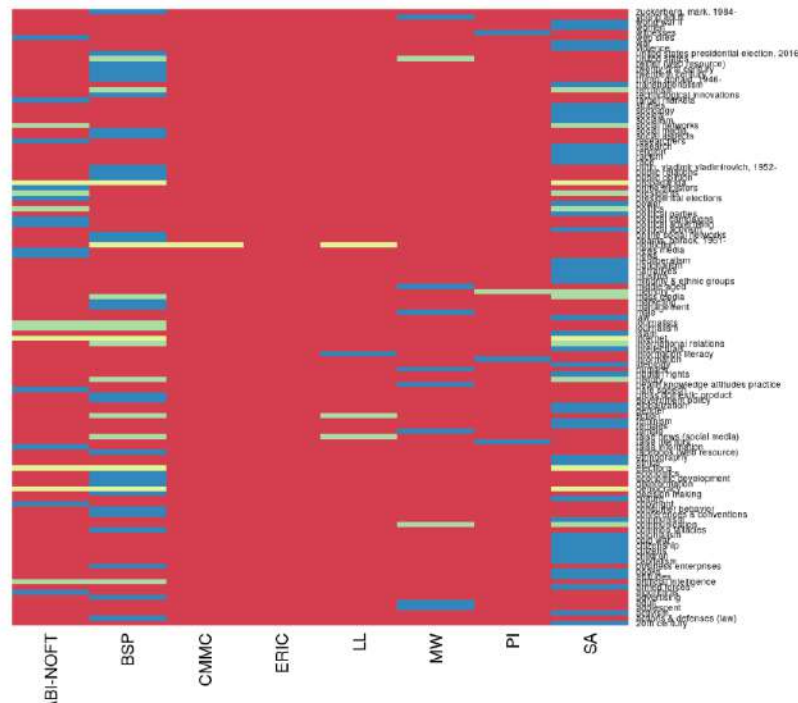


Fig. 2. Heatmap of high frequency bibliographic subject terms in the second decade of the 21st century per database.

20

Conclusions: This subject analysis reveals the history of social anxieties across different fields. The method shows promise in demonstrating the specialization and splintering of scholarship among research areas, and also provides insight into limitations of using subject databases for literature searches, as the ‘aboutness’ is constricted to the interests of that field.

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A Bibliometric Approach to Measuring Societal Impact of Research Based on the Principle of Productive Interaction

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Abstract: This paper presents an evolution of the hybrid framework for the analysis of societal impact of research. In the first phase of the research we have shown a case study (biomedical and social sciences research institutions and faculties on public universities in Croatia) where it was possible to measure the societal impact of research based on the analysis of the evaluation reports using the theory of productive interactions. Following (Spaapen and van Drooge, 2011) we assessed a sample of societal interactions submitted by an institution under evaluation as representative for their practice. Productive interaction can be categorized in three categories according to the taxonomy of (Spaapen and van Drooge, 2011):

- Direct interaction
- Indirect interaction
- Financial interaction

In this paper we present a bibliometric approach to measuring societal impact of research on the institutions in the field of biomedical sciences. The analysis will encompass seven faculties of public universities and three public scientific institutes in the field of biomedical sciences. We propose to use two sources to quantify the above-mentioned types of productive interaction. Croatian scientific bibliography (CROSBI) database lists a collection of all outputs by individual researchers. It is maintained and its accuracy monitored by the Center for Scientific Information of Rudjer Boskovic Institute. Furthermore, it is mandatory by bylaws of Croatian Science Foundations (CSF) for all researchers – participating in CSF funded projects – to maintain the records of all their research outputs accurate since these records can be used in internal CSF evaluation procedures.

Further, publications in the field of biomedicine from the Web of Science (WoS) database for the sample period 2013-2017 will be analyzed. We augment these records – covering publications in WoS listed sources only – with enhanced publication data from the Croatian Scientific Bibliography (CROSBI) in the same period. CROSBI can provide quantitative information on the impact of scientific work on society using the framework of productive interaction since it lists research outputs like science popularization papers, expert reports, theses, lecture books and such.

By cross analyzing data from commercial databases and the CROSBI database, we obtain quantitative data and compare research areas solely against bibliographic indicators and based on a new indicator which includes measurement all other types of publications. Papers contained in the CROSBI database will be divided into two basic categories; works that show the scientific impact of scientific work and works that show the societal impact of scientific work. The category of papers showing the societal impact of scientific work will be analyzed according to a matrix for productive interaction. It is our assumption that the additional publications not in commercial bases represent a good starting point for classifying societal relevance of research results according to the conceptual framework of productive interaction.

Keywords: societal impact of scientific work, Croatian system of higher education and science, productive interaction

A Bibliometric Study of Scholarly LIS Literature Related to Collection Analysis/Evaluation

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Abstract: According to Nisonger (1992), collection evaluation techniques may be categorized into either of two ways: 1) collection-centered versus client-centered or 2) qualitative or quantitative. Crowley-Low (2002) lists two types of collection analysis or evaluation 1) materials-centered, such as determining how many materials in a collection support a particular curriculum and 2) use-centered such as analysis of circulation statistics to determine items that were most checked-out and least checked-out.

Ciszek and Young (2010) incorporates both materials-centered and use or user-centered categories of collection analysis with quantitative and qualitative approaches:

1. User-centered quantitative assessments such as circulation and use statistics
2. User-centered qualitative assessments such as focus groups, interviews, or surveys
3. Collection-centered quantitative assessments such as those that compare one collection to another or to a checklist of recommended books or growth of the collection over time
4. Collection-centered qualitative assessments such as examination of the condition of a collection or a content-analysis of a collection.

A bibliometric study of scholarly LIS journal articles on collection analysis or evaluation or assessment was conducted to determine publication pattern per year since 2010, core journals, most prolific authors, and type of collection assessment that was the focus of the study using Ciszek and Young's categories: user-centered quantitative assessment, user-centered qualitative assessment, collection-centered quantitative assessment, collection-centered qualitative assessment.

Keywords: collection analysis, collection evaluation, bibliometric, qualitative research, quantitative research

22

Building Dynamic Business Information Financing for Enhanced Agricultural SME Innovations in Uganda

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Abstract: Highly innovative Small and Medium Enterprises (SMEs) generally provide additional societal and economic benefits to countries through several ways like; technology uptake, enhancing the value chain processes, social cohesion, amplifying the comparative advantage and ultimately contributing to national economic growth and development. This study purposed to investigate how SMEs in the Ugandan agricultural sector are adopting the innovations from the Research & Innovation (R&I) information with the help from banks and the different agricultural SME financiers.

The study was underpinned by the systems theory and it adopted a positivist research paradigm and an exploratory research design. Quantitative methods epistemology was employed. Quantitative data were collected from a sample of 231 SME respondents in the agricultural sector using semi structured questionnaires. The respondents consisted of proprietors of SMEs in the agricultural sector in the central region of Uganda and their representatives.

The findings of the study revealed the; SME innovations engineered from the R&I information accessed from university libraries, SMEs experiences with certain peculiar difficulties when adopting and applying innovations and the SME's awareness of flexible agro-business loans from financial institutions. The study further reveals the SME experiences of applying for these agro-based loans, some of the benefits SMEs have got from patronising these loans, the reasons why many SMEs don't apply for these loans and suggestion on how to improve business financing of SME innovations.

Keywords: SMEs, university libraries, research and innovation information, Uganda

Categorizing the Meaning of Libraries from the Users' Point of View

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Abstract: Nowadays, the digitalization of information is rapid having many effects in libraries especially on the management activities. One of these effects is the emergent independent relation between place and service. Users come now to the library for different activities, this depending on their category, on the type of offerings in the library they visit and on the type of user's needs. These activities, meaning coming to the library as a place and the purpose of it, are interdependent though a traditional way of conceptualizing libraries. What does digitalization mean for the concept of "visit"? There is a need to capture the emerging concept of visit in order to understand the value of libraries in the digital era. And also to categorize the current types of visits to the libraries. In this paper preliminary comparison is done between Sweden and Romania in order to have the possibility for a deeper understanding. Digitalization is a force too in globalisation. As a reference point we use the knowledge of hospital care that also needs to justify the use of common resources and has a very important value: the health. In the same way we could say that the value of libraries is knowledge care in the societal body.

Keywords: libraries, library visits, users, Sweden, Romania

Censorship in American Public Libraries: An Analysis Using Gatekeeping Theory

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Abstract: One pressing issue today for libraries in the United States is the censorship of information. This study applies Kurt Lewin's gatekeeping theory to examine the decision-makers as well as the different pressures and constraints that are at issue in decisions regarding challenges and censorship attempts that occur in public libraries. Through an in-depth case study of two United States federal court cases dealing with challenges and censorship attempts that occurred in public libraries, this study seeks to identify the gatekeeping structures present within public libraries, specifically those that contribute to conditions that encourage librarians to censor. A qualitative content analysis of court documents as well as newspaper articles covering the court cases being analyzed, followed by a series of interviews with individuals involved in the cases, seek to reveal in more complexity the gatekeeping structure present in public libraries. Knowing who the decision-makers, or gatekeepers, are in the decision-making process, whether it is library boards, library directors, or public officials, is crucial to the understanding of censorship in public libraries.

Central to the study is the phenomenon of librarians themselves engaging in acts of censorship. Factors such as power and authority can lead librarians to engage in censorship activities as a reaction to instructions from their governing bodies. Without a clear understanding of the function of gates and gatekeepers in the decision-making process, libraries may allow unintended censorship of ideas and information to persist. This study seeks to inform librarians and information professionals to become better equipped to support the fight against censorship.

Keywords: case study, censorship, collection management, gatekeeping, intellectual freedom, Library Science, public libraries

24

Comparing Different Methodologies Used in Wayfinding Research in Library Facilities

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Abstract: People need to navigate library spaces to access and use library services and resources. The way people navigate facilities is through wayfinding. Wayfinding is a growing research area for libraries (academic, public, school, and special). The methods used to research wayfinding in libraries vary widely from signage inventories to patron surveys to task completion experiments. People can be observed while they are wayfinding in a library, but observation does not allow insight into what a person is thinking while wayfinding. Interviews can be used to investigate how people think while they are wayfinding, but these are usually after-the-fact and subject to limitations of memory and people's awareness of their unconscious thought processes. Understanding which methods are most effective for different research

purposes is crucial to future research in this area. This paper presentation will report the results of a content analysis of published research on wayfinding in libraries specifically focused on (a) which methods are used to research wayfinding in libraries, (b) the relationships between method(s) chosen, library type, and research purpose, and (c) the efficacy of the method(s) chosen for answering the stated research questions.

Copyright Literacy of LIS Students in Portugal: Some Results from a Case Study

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Abstract: Changes in information access and consumption behaviors have significantly changed with the spread of Information and Communication Technologies, in general, and with the availability of digital communication networks and mobile devices, in a more specific approach. This context makes available a massive amount of contents, which can be accessed by all without the need of great financial or cognitive effort. So, unauthorized consumption of content, both through download and streaming, has become an integral part of the daily lives of the majority of social actors in their multiple uses of the internet. Disrespect for copyright, both because of ignorance of the meaning of this notion and unawareness about its consequences, has become a problem on which we need to reflect and for which action is needed. In this scenario, information professionals and Library and Information Science (LIS) students will have an essential role to play. As far as LIS students are concerned, it is important to know what knowledge they have about copyright laws and what kind of content and approach should be followed in the curriculum of undergraduate, master's or doctoral programs.

In light of these assumptions, in 2012 in Bulgaria, (Todorova *et al.*, 2017) initiated a study about the knowledge of archives, museums and libraries professionals on copyright issues. These professionals increasingly need to deal with complex problems of copyright and need to have specific knowledge and skills. This study gained an international dimension, with the participation of 13 countries, including Portugal, and shortcomings in the copyright competencies of information professionals were identified. In this sense, it has become important to study the level of competency training of LIS students in order to make proposals for improvements in this area. Thus, another multinational study regarding copyright literacy skills among LIS students, called Copyright Literacy of LIS Students (CoLIS) was designed, in 2017-2018.

For data collection a questionnaire with 13 questions was created, with closed answer options. Questions were about the identification of the kind of works under copyright protection, familiarity with copyright issues, information sources used to improve copyright knowledge, national copyright law, and students' personal opinion about general knowledge and perceptions of copyright and related aspects in the specific context of information services and other cultural institutions. Four questions about demographic aspects were also included. This survey instrument was translated from

English to Portuguese and data were collected among undergraduate and master students from LIS area at Polytechnic Institute of Porto and University of Porto. 79 valid questionnaires were collected, applied between February 2018 and February 2019. The paper will show the key findings on familiarity, knowledge, awareness, and opinions on copyright issues of LIS students. A comparison with the results from other countries using the same survey instrument will be undertaken. A discussion about LIS education curriculum in Portugal regarding copyright aspects is also intended, considering Intellectual Property as an educational weapon.

Keywords: copyright literacy, LIS education, Portugal

Data-driven Model (DDM) for Collection Development and Management: From Library Data to Value Generation Institutional

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Abstract: DDM is a proposal for capture, analyze, discover insights from data and make proposals from Collection Development to the Pontificia Universidad Javeriana Library. Our model finds a value for the operation and innovation of the library from the data present in the information systems, repositories, social networks, ERP, CRM, among others, exploiting the data and designing value proposals for new services or Products from the library. Finally, the DDM identifies the profiles for an analytical team for the development of collections.

Keywords: data-driven model, collection development, collection management

26

Designing a Faculty Survey to Assess the Open and Affordable Textbooks Program at Rutgers University

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Abstract: Rutgers University Libraries' Open and Affordable Textbooks (OAT) program provides incentive awards to faculty who choose to switch from traditional course materials to low or no-cost materials, such as course reserves, library-licensed content, or open educational resources (OER). In 2019, members of the OAT project team distributed a survey to the faculty who received awards during the first two cycles, in order to assess the program and identify areas for improvement. Survey responses demonstrate that the program at Rutgers is well-received by faculty and that the funds provided are adequate for evaluating and adopting new course materials such as library resources or OER. They also suggest potential future directions for the program, such as increasing direct support from department and campus leadership, altering the incentive structure, and overcoming barriers to OER adoption.

This presentation will describe the design of the assessment survey employed at Rutgers University Libraries, which drew on previous research on faculty attitudes toward and use of OER. The survey was anonymous and primarily closed-response, with optional open-response questions that allowed for more nuanced responses. The questions were divided into three broad categories: demographic information that included discipline, tenure status, and other employment characteristics; details about the redesigned course, such as type of course materials adopted and perceived impact on student performance; and general experiences with and evaluation of open educational resources (OER) outside of the OAT program. By sharing the survey in use at one university and a brief summary of results, the presenters hope to engage attendees in a discussion of effective methods of assessing textbook affordability initiatives and incentivizing OER adoption.

Keywords: open educational resources, textbook affordability, faculty, surveys, assessment

Developing an Analytical Framework to Study the Inclusion of Information and Research Skills in Higher Education Curricula

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27

Abstract: We describe the first stage of a larger research, in which we generated a qualitative analytical framework that will be used to study how bachelor-level higher education curricula teach and develops of information and research skills (IRS). Such study will analyze a worldwide sample (determined through a bibliometric analysis of international university rankings, stratified by country) of curricula from universities considered successful in research, systematically determining effective curricular elements and best practices for IRS' teaching and development; hence, the upcoming stages of this research will be the analysis of the international sample and the development of a common curricular framework from such analysis. In this paper we discuss the characteristics and implications of its first stage: the generation of the mentioned analytical framework, which includes the following categories: a) infrastructure and resources; b) educational techniques and strategies; c) teaching and learning methodologies; d) competencies; and e) contents. This research may improve bachelor-level curricula regarding IRS' issues, by identifying the elements that may be transversally applied to the curriculum and reinforcing the efforts of typical research methods courses. Moreover, we discuss the challenges that may be hampering students' development and even young researchers' performance, particularly in developing countries: a) a need to improve universities' research capabilities; b) insufficient budget for research; c) decrease of interest in research; d) a limited number of professors can conduct research and a large divide among universities' scientific production; e) collapse of reading habits in society; f) information and digital literacy challenges; g) deficient teaching practices in research methods courses; and h) the presence of university programs that forgo the presentation of a thesis as a requirement to obtain a degree. This research may improve IRS' teaching and development at the bachelor-level, because they are

almost exclusively taught in research methods courses and are not usually implemented transversally throughout curricula.

Keywords: information literacy, research skills, curriculum, higher education, bachelor programs

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Digital Humanities in the Library of the Carlos III University of Madrid

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Abstract: In recent years, the Library of the Carlos III University of Madrid is working with different research groups in the area of Humanities and Social Sciences, providing support in the development of specific projects related to the field of Digital Humanities.

The role of the library is to advise the Research Group on the design of the product that is going to be developed, especially in relation to information and knowledge management, and to provide the technological tools and training necessary for the appropriate development.

You can see a sample of the projects developed in:

https://www.uc3m.es/library/digital_humanities

In these moments, we are working on a specific development to have a single technological platform, Omeka S, to accommodate different sites that host different projects. Now a catalog of the Cult of Mitra in Roman Hispania and a database on Migration Cinema is being prepared on this new platform.

This presentation aims to show the experience developed in the Library of the University Carlos III of Madrid as an example of good practices, with special emphasis on the relationship between library and researchers and the joint work developed.

Dimitris Rondiris(1899 - 1981) Physical Archive to digital collection

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Municipal library of Piraeus, Greece

Abstract. Dimitris Rondiris was one of the most important European theatre directors of the 20th century. His contribution to the revival and the global dissemination of Ancient Greek Drama was enormous.

In 2016, his archival collection was donated to the Municipality of Piraeus, by his daughter Kostoula Rondiri. The archival collection includes twelve hundred letters, notes and sketches from the performances he attended in Germany during the period of his studies (1929 – 1933) , five hundred show photos, mainly of the Piraikon Theatron, reviews and theatre programs, 80 director’s notebooks and plays with his notes, three hundred seventy three books and periodicals in several languages, many awards and honours.

The digital archive contains almost all the physical archive in digital format, organized and documented according to the ISAD(G) standard, and catalogued according to the Dublin Core metadata initiative.

The information was supplemented by the relevant bibliography, while previous involvement with the archive and the detailed publication that followed it were a valuable guide as they rescue data that failed to follow the rest of the collection to the Municipality of Piraeus.

Rondiris collection is open to all; available to all researchers who might be intrigued by similar questions.

Discussion Groups and Chat Rooms – An Ethical and Methodological Analysis

29

Ari Haasio

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Abstract: Discussion groups and chat rooms have been used as data in several studies focusing on information seeking and information practices (e.g. Savolainen 2019a; Savolainen 2019b; Stetten et al. 2019; Miller et al. 2019; Haasio, Harviainen & Savolainen 2019; Hämäläinen & Haasio 2019; Haasio 2015; Savolainen 2015; Hasler, Ruthven & Buchanan 2014; Savolainen 2011; Wikgren 2003). In many cases, discussion groups and chat rooms may have an important role when seeking information in everyday life. They are also meeting points and chat rooms especially are places where people entertain themselves and find new acquaintances.

In many cases the topics are quite sensitive and they may handle intimate questions like diseases, sexual orientation or mental problems. The question of anonymity is extremely important when considered from an ethical viewpoint. There are also several other issues to be considered when using chats and discussion groups as data. One of those is the reliability of the content and another one is the question of trolling. The main research questions of the analysis are:

1. What types of methodological approaches are used in studies that focus on discussion groups and chat rooms?
2. What types of ethical problems should be acknowledged when doing research about chats and discussion groups? To what extent have ethical issues been taken into account in previous studies?

The data consists of previous studies made in the field of information studies in years 2010-2019. To identify relevant research material, databases such as EBSCO, Google Scholar and Library and Information Science Abstracts were searched. The data was analyzed using content analysis. In addition, previous methodological literature about

internet research was revised to provide background for both the methodological and ethical points of view.

The findings reveal that a great deal of the studies about information seeking in discussion groups have used quantitative methods. Qualitative analysis in its different forms could be used more in the future to gain a deeper understanding of people's information behavior. The problems concerning the data from the ethical point of view arise from the anonymity and reliability of the participants' opinions. There is a certain degree of trolling in many discussion forums, which has to be taken into account in the analysis. So far, researchers have not given plenty of attention to chat rooms. In chat rooms the discussion is quite personal by nature and collecting material is more difficult. The discussion itself or the nicknames used can be a target of the analysis. Furthermore, different ways to analyze data will be introduced based on the previous research.

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EDI within Libraries: Do We Know What's Effective, Successful or Failing?

Jean Clenney, Jade Geary and Valerie Lookingbill

Abstract: Equity, diversity, and inclusion (EDI) have been a major area of focus for libraries over the past few years. The Society for Human Resource Management (SHRM) defines diversity as “the collective mixture of differences and similarities that include for example, individual and organizational characteristics, values, beliefs, experiences, backgrounds, preferences, and behaviors” (SHRM, 2008). While diversity is the mix of individuals, inclusion is the mix working together (Whare, 2017). This type of result is not always apparent. “Diversity and inclusion are often

used interchangeably in the workplace, but they are actually quite different.” (Mendez, 2016). Diversity is not only about gender, sexual orientation, or ethnicity; it is about all these and other attributes combined.

Many library patrons identify within numerous marginalized populations. As such, they significantly benefit from the free, abundant resources and services available in libraries that they may not otherwise be able to afford or access (Conley, Ferguson, & Kumbier, 2019). However, even within libraries, there are high levels of stigma associated with asking for help or receiving services, as marginalized individuals have historically, and often still, experience discrimination when they seek support. There is a common perception among these populations that reaching out for help will cause more harm than good. As such, it is safer to seek and access information and resources independently or exclusively with resources provided by individuals who share one’s identity (Conley, Ferguson, & Kumbier, 2019).

Through a variety of initiatives, libraries aim to ensure the needs of both patrons and staff are met regardless of their background, identity, or circumstances. Even with programs aimed at EDI, the question remains, how are we meeting the needs of these patrons? This study explores what services, programs, resources, collections, or other offerings that libraries provide to meet the needs of all patrons. This paper presents the findings of an international survey which focuses on all types of libraries to develop a greater understanding of what libraries are offering to meet the needs of their patrons and staff. By exploring what is being offered, stating what has proven successful or unsuccessful, we can explore the ways the field is supporting the diverse needs of patrons.

31

Elearning for Professionals – “Vogue” Trend or a Unavoidable Alternative?!

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Abstract: The report explores the eLearning capabilities for acquiring modern vocational education in the cultural and creative industries in Bulgaria. The problem is socially significant and affects large groups of the population, employed not only in the public but also in the private sector. This is the main point on which we build our hypothesis – our strategic tool is to create a modern virtual environment for vocational education through an educational platform. It enables successful integration of lecture courses and all new digital tools for learning and upgrading knowledge and skills by combining hybrid vocational dual training with distance learning. The main goal of this study is to identify the key issues of vocational training in online environments, as well as the best LMS for eLearning in various CVT certified professions at ULSIT, Sofia. In support of continuing vocational education is implemented a scientific project “Communicational Model for Interactive Educational Environment for Post-graduate Professional and Vocational Studies in the Field of Cultural and Creative Industries“, funded by the NSF of the MES, Bulgaria. It creates an opportunity for professional eLearning. The goal set defines the tasks of the study: To conduct a review of the literature on the topic in order to identify useful concepts and practices appropriate for the effective integration of eLearning in traditional vocational training courses; To be update existing courses in

line with eLearning capabilities; To be monitor real learner reference groups on how they perceive digital educational content; To be analyze the selected virtual LMS and conduct tests with approbation content; To be analyze the results achieved and to formulate new perspectives. The research methodology includes: content analysis of concepts, models, guides and good practices for managing a virtual learning environment; analytical bibliographic study of publications on the topic; monitoring methods of reference groups of trained adults by professions “librarian” and “graphic designer” after secondary education; structural analysis of the developed digital learning content. The expected results are to build a completely new educational environment for training and validation of knowledge within NAVET accredited professions. As a result of the set goals and objectives, we have developed modern digital educational programs and created eLearning content on the topic: information competence; management and marketing competence; linguistic and communication competence; acquisition of specific theoretical and practical knowledge of two professions. The basis of the support project is the development of a virtual environment based on the open knowledge platform ILIAS 4.1, which offers flexible course management and a personal workspace for students. The discussion shares the experience gained by our team in choosing the right LMS. The chosen ILIAS platform is found to be the most suitable option both for objective economic reasons and for its flexibility and wide capabilities. The developed curriculum content and its testing provided real evidence of the effectiveness of the chosen approach. The content in the pilot e-version covers part of the curriculum lectures. The conclusion summarizes the results achieved, which are only the beginning of the promotion of sustainable dual hybrid digital vocational training. References include about 30 bibliographic resources.

Keywords: contents of training professional courses, dual vocational education, eLearning for professionals, learning management systems, virtual learning environment

Elementary, My Dear Watson: How Special Collections Use Automated Collection Management Software to Analyze Circulation Statistics and Resolve “Missing Book” Cases

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Abstract: This presentation will discuss automated request and workflow management software Aeon, designed by Atlas Systems (USA) specifically for special collections libraries and archives. Traditionally, even in major US universities and research institutions, special collections required patrons fill requests for items by hand, on paper; circulation records were kept as one copy of all paperwork filed by patron’s name and another copy -- under respective shelf-mark tab in a file drawer or a box. For the Beinecke Library at Yale University, with a few million items in two different storage locations and about 20 thousand items in circulation annually, keeping paper records of such scale took hours of staff work and hundreds of linear feet of shelf space. Collecting research and circulation statistics was not possible; project management (e.g., loan requests, exhibition catalogs, classroom support) was highly prone to errors; tracking materials missing from their proper shelf location was

extremely challenging. Therefore, when Atlas Systems developed Aeon, our library was one of the first special collections repositories in North America to implement the software in an effort to streamline collection management and access.

Aeon offers complete reading room management, including online user registration and advance paging directly from catalog records and finding aids, collaborative "activities" feature for managing instructional sessions, exhibits and other projects involving multiple users and items, highly customizable workflow management with automated routing rules and status tracking for complete transaction audit trails and enhanced collections security, and robust reporting platform and custom query tools to facilitate intelligent data mining of transaction records and sophisticated analyses of usage patterns and user communities. Since its introduction in 2012, Aeon has helped Access Services staff at the Beinecke library collect data about thousands of items and compile research statistics on them. As we pay most thorough attention to security of our unique and irreplaceable items, Aeon helps our staff resolve issues with items which are supposed to be on shelf, but are not immediately found: from most simple cases of the book checked out to a different person or on hold for an event at the time of another request, to most complicated cases of items checked out to a few different locations at the same time, automated rejected requests for off-site storage delivery, to tangled stories of human cataloging errors which happened decades ago or shelving errors that happened recently. Circulation and workflow data collected, stored, and reported by Aeon can trace a long and winding road of a precious item traveling from its shelf place to the patron's hands through retreats and detours.

Keywords: data collection, data analysis, circulation statistics, tracking

33

Ensuring More Services with Less Resources: Business Process Redesign as an Efficiency Multiplier

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Abstract: The challenges that academic libraries face today entail the evolution of some professional roles or the creation of new ones such as Data Librarian, Open Science Librarian or Outreach Librarian. Often these roles are created within the organisational model of library services, replacing traditional functions. How can the Library maintain the highest quality of its entire charter of services? How can it enlarge the spectrum while human resources remain stable or, even, decrease? The Library of the European University Institute has started to rethink its strategy and required core services, redesigning tasks and responsibilities of new and existing library positions within the organisational structure. Business Process Redesign (BPR) has been adopted to model and define the organisation according to its current needs. Several processes of the Library Back office are - textually and visually - analysed and described with the aim of optimising the workflows and creating a clear understanding of responsibilities within the library and across adjacent organisational units. This paper presents the EUI Library findings and first conclusions.

Keywords: university library, RACI-matrix, process description, quality strategy, Business Process Mapping (BPM), Business Process Redesign (BPR)

Evaluating the Benchmarking as a Methodology for the Academic Library Quality Enhancement

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Abstract: Benchmarking can be defined as a methodology where the business processes, performance metrics and best practices are compared. Usually, the comparison is done between two organizations, but one can also choose different settings for comparison, e.g. when benchmarking is done statistically the number of organizations compared can be a large one – for example all the libraries in one country or even in the world. The main function of benchmarking is to enhance one's own practices and processes and a win-win situation is usually the most motivating for this kind of approach. We have been practicing benchmarking between the Universitat Autònoma de Barcelona Library (Spain) and the University of Eastern Finland Library (Finland) for about ten years. The aim of our paper and presentation will be 1. to give a critical look to the benchmarking as a process in quality enhancement, 2. to summarize the findings done in our benchmarking project and 3. to give a model sheet for the most fruitful approach to benchmarking between academic libraries. The results also reveal the best practices of benchmarking in these institutions; recommendations are given to the further development of the library benchmarking and co-operation between libraries.

Keywords: academic libraries, quality management, benchmarking, service development, best practices

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An Evaluation System for the Degree of Research Interest of Plant Species

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Abstract: Under the background of the rapid development of ecology, botany, agricultural science, pharmacology and biodiversity protection and other disciplines, research output on plant emerges in endlessly. However, so far, there is no relatively scientific evaluation system to evaluate the degree of scientific research on various plants. In this study, an evaluation system for the degree of research interest of plants was constructed by selecting bibliometrics data (such as the number of papers, number of patents, and number of discipline categories related to species, etc.) and botany scientific research activity data (such as the number of specimen collection, the number of image collection, the number of germplasm resources, etc.) as indicators, and the index weight was set with reference to expert opinions. Considering the practicability and local characteristics, 632 species of traditional Chinese medicine plants mentioned in Pharmacopoeia of the people's Republic of China (2015 Edition) were selected as the evaluation objects to verify the SDI index. The results show that the index construction method is reasonable and the ranking is in line with the general knowledge of scientific researchers. The list shows that *Oryza sativa*, *Camellia sinensis*, *Glycine max*, *Salvia miltiorrhiza*, *Glycyrrhiza uralensis*, *Ginkgo biloba*, *Angelica sinensis*, *Panax ginseng*, *Angelica dahurica*, *Capsicum annuum* have become the top ten species of concern. Plants with medicinal and edible value, star plants in traditional Chinese medicine, and traditional Chinese medicine with special use have attracted more attention. The comparative analysis of the attention degree of Chinese and foreign scientific research shows that: Chinese and foreign researchers have a high degree of similarity in the research attention degree of various plant species, and the traditional Chinese medicine is gradually recognized by the world.

Keywords: evaluation system, plant species, bibliometrics, scientific research activity

35

The Everyday Life Information Seeking Behavior of Muslim Newcomers in Montreal, Canada

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Abstract: The research will examine the everyday life information seeking behavior (ELIS) of Muslim newcomers in Montreal, Canada, as well as their information needs and the challenges they face. While there has been some work that focuses on the information needs and information seeking behavior of newcomers in the United States, to date, there has been little research to account for Muslim newcomers' information needs in Canada from the perspective of the library and information science (LIS) field. Most information behavior (IB) research categories Muslim newcomers in Canada according to nationality or gender. My study focuses on the IB of Muslim newcomers in Montreal regardless of their nation or gender. Muslims

come from different backgrounds; nevertheless, they have common and shared needs as followers of Islam (e.g., requiring prayer time during work, and gender-separated sport activities). Consequently, Muslim newcomers could be better served by the increased attention of researchers, as it will support developing better information systems for this newcomers' population.

An Exploratory Study of Organizational Alignment in U.S. Academic Libraries

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Abstract: One way for academic libraries to increase funding from universities is by demonstrating the value they create through *organizational alignment*. This exploratory study tests if organizational alignment is effective. To explore the argument that organizational alignment benefits university libraries, we studied athletic departments and libraries at Southeastern Conference (SEC) member universities in the United States (U.S.). We studied athletic departments and libraries, because U.S. collegiate athletics raises substantial amounts of money for universities. However, questions exist if athletics are central to the mission(s) of universities and if they deserve the investment universities make in them. Comparing library and athletic department funding, and then examining how well each align with university missions, therefore, provides a way to test if organizational alignment is effective in a novel manner.

In our study, during a first and exploratory phase, we analyzed library and athletic department spending. Our motivation was to explore financial tensions in higher education with a focus on libraries. High profile media stories led us to question if university athletic spending comes at academic libraries' expense. Furthermore, the library literature argues organizational alignment is a strategy that can be used to garner funding, but this argument seems questionable in light of the substantial funding that many athletic departments receive, despite their indirect contribution to scholarship and education. Next, in the second phase of our study, we analyzed mission statements to find if SEC libraries were in better alignment with universities than athletic departments and whether alignment correlated with increased funding.

Our findings are as follows. First, we learned that, unsurprisingly, library mission statements aligned most directly with universities, but libraries received less funding. This calls into question when and also where alignment is a practical strategy for library managers to pursue. Second, we present four explanations for our findings. These are:

1. Mission statements do not always reflect organizational realities
2. Universities in the U.S. are often forced to compete for students and tuition dollars, so athletics represents a competitive advantage in an increasingly neoliberal environment
3. Libraries do not always communicate their value as well as athletic departments
4. Administrators do not always see libraries as delivering the value to universities which they actually provide

Aside from identifying these explanations, we conclude that there are limits to the utility of organizational alignment, so U.S. academic libraries should stay open to alternative revenue generating strategies. Finally, because this study was exploratory, we argue that future research should compare libraries with other common academic units to test organizational alignment as a potential revenue generating strategy more comprehensively.

Keywords: organizational alignment, mission statements, strategic planning, higher education

Extracting with Style: Using Natural Language Processing to Generate Summaries of Rare Materials

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Abstract: In our collection, a great number of resources have a blank summary field (MARC 520), presenting an opportunity for us to improve resource discovery for patrons. Not only can a good resource summary help a patron decide if they want to access a resource without leaving the library website, but the summary field is an indexed field that can increase a resource's discoverability in our search layer1. Unfortunately, manual creation of summaries is staff-time-intensive, so if we desire to improve that MARC field on a large scale, it is necessary to turn to machine learning methods. There are two goals of this project: the first is to use Natural Language Processing to extract something from a text that can add discoverability to a resource. The second is to use NLP methods to create a coherent summary which a student or faculty member could use to decide whether or not they want to take the time to read or check out a resource.

The two main schools of research in NLP summarization are abstractive and extractive summarization. Abstractive text summarization generally uses deep learning to glean a level of structural understanding of text that makes the generated text much more fluent and understandable. Other methods of summarization are all extractive - meaning they pinpoint sentences or sections in the text which contain the main ideas and return them as a summary. State of the art methods in extractive summarization use deep learning, but not all do. The amount of training data necessary, including text with tagged sections and corresponding human-written summaries, proved prohibitive to exploring deep learning methods of summarization. Because of this, this project focuses on extractive summarization - specifically lightweight methods of summarization that don't require deep learning.

Using special collections documents at Notre Dame, I read OCR'd text, extracted keywords based on co-appearances of words and generated summaries with a few extractive summarization methods. The main method I focused on, which yielded the best results, was TextRank2. I compare methods with each other and against a rule of thumb baseline. Both qualitative and quantitative results (using ROUGE score, a common metric used in NLP summarization research) are presented, and then I and discuss further incorporation for improving library records. I also compare the summaries and keywords extracted to other subject headings we hold in our MARC records. Code for running similar projects will be made available via Github.

¹Preliminary analysis of our bibliographic and usage data has shown that there is a correlation (not necessarily causation!) between patron usage of a resource and completion of summary fields and tables of contents.

²TextRank is a summarization algorithm based off Google's famous PageRank algorithm.

Keywords: summarization, discoverability, natural language processing, machine learning

The Factors of Free MT and Open Access in E-publishing

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Abstract: The aim and objectives of the research are supposed to help the process of making information freely accessed and “target language converted” using websites of the translation companies (SmartCat platform), CAT tools. Further studies can bring some light on the social issues of information delivery accessibly and free. The study also makes an attempt to emphasize that the machine translation process is agreed to present certain problems for average users, with only translation portions possible to be identified which is slowing factor in the process of recognizing the ST. The idea is to bring scientists to the easier dissemination of the scientific content to fast sharing ideas in the process of further scientific development, so the importance is being given to supporting free translation platforms even if it “steals” from the translators' benefits. The effort should be further taken in order to guarantee scientific progress now and on.

At the moment, (CAT) tools are without any doubt play an important part in academic world. Free access to information, translation memories, machine translation systems, terminology sources contributes both EP and translation process. Especially scientists e-publishing in order to fast react to new theories and experimental data without language barriers is gaining its importance now. The necessity has reached growing movement to create e-journals and platforms (Open Access Journals (DOAJ), Latindex, SciHub, arXiv.org) freely accessible to the entire public.

The important role in bringing science to public is proved to be given to the phase of machine translation. Its tremendously rising necessity now is predisposed to the burning scientific issues to give response to the issues of for e.g. environment, medicine, social unsolved problems, and problems of education. Some make the case that translating from scratch can be faster. With the appropriate process in place, machine translation can be used to respond to most not only translation requirements, but scientific needs.

Machine Translation Process is known to consist phases of text Input, editing, converting into appropriate formats. However Once the text is translated the target text is to be reformatted after post-editing. Another MT problem is the size of translation memory file. Now users often benefit from free online alignment software tool translation tool with Google Images to make work easy. It makes possible to create alignments from archived documents, as well as to download HTML alignment.

However an API key needed in the process is to be paid and Google Translate API pricing is varied. The interest to the problem of financial support of free e-publishing should be risen and the solutions promoted.

First Aid for Libraries in Czech Republic in COVID-19 Pandemic Time

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Abstract: Our activities were focused on first aid steps in libraries during pandemic time. Many practical questions were obtained about risks and activity of virus. In Department of Development and Research Laboratories, we were focused on preparation of poster what to do, how to do and how we can work in libraries without risk. We translated this poster in few languages in cooperation with colleagues from Slovak, Poland and other countries. We also organized production of disinfection solution for librarians. Our activities were also focusing on study of ozone and UV light on library materials. We would like to present these results and share information.

39

Green Librarianship – Conceptualisation, Areas, Methods of Evaluation of Activity Results

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Abstract: Degradation of the environment, its impact on the overall phenomena occurring on the planet, methods of inhibiting the negative effects of the human activity are common topics not only in public discourse, but also more and more often in the area of librarianship and library science. Libraries have taken a number of measures aimed at minimizing the negative impact on the environment, from ensuring a certified building, through waste segregation, saving water, electricity, recycling and environmental education. Most often, such facilities are called green libraries. This term is used in scientific, professional and popular science literature. However, it is significant that the term is used intuitively while its definitions are vague and ambiguous. The term of green library emerges with reference to various aspects of libraries operations, largely in connection with specific examples. A preliminary analysis of the content of publications dealing with the issue of green libraries indicates a modest representation of theoretical and synthetic texts. Similar shortcomings apply to the encyclopaedic and lexical publications. I intend to fill the gap with this article. I decided it was necessary to outline the framework for this segment of the library activities, incidentally called green librarianship. This article pursues three objectives: 1. Conceptualization of the green librarianship, 2. Indication of scope (areas) of the green librarianship, 3. Indication of methods of evaluation of

the results of activities falling within the scope of green librarianship. The method of literature analysis was used here, including quantitative and qualitative analysis of the Library Information Science & Technology Abstracts (LiSTA) content. The author assumes that the achievement of the indicated goals will contribute to the increase in awareness of green librarianship, the growth of initiatives implemented in this field and the expansion of research fields in the library science.

Keywords: green librarianship, librarianship, green library, sustainable library, library science

How Deep the Web is?

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Abstract: The Internet is a vast ocean of information and intangible digital domain more than we can perceive in our senses. We can hardly understand the meaning of numbers such as 2.5 quintillion bytes of data generated by users each day (Marr, 2018). Thus, we may find data that may undermine Internet data reliability. For example, the claim that "90% of all the data in the world has been generated over the last two years" was mentioned on May 2013 (Dragland, 2013), December 2016 (Loechner, 2016), May 2018 (Marr, 2018), June 2018 (Ahmad, 2018), March 2019 (Petrov, 2019), June 2019 ("90% of the data on the Internet has been created since 2016" (Schultz, 2019)).

The same relates to the deep web: according to a study conducted in March 2000, "public information on the deep Web is currently 400 to 550 times larger than the commonly defined World Wide Web" (Bergman, 2001). But the statement and the number remain the same over the years: December 2015 (Thompson, 2015), December 2017 (TEDxWarwick, 2017), May 2018 (Rice, 2018), September 2018 (Choudhury & Kharpal, 2018),

The lecture will draw the picture of the information above (the Internet) and below the surface (the deep web and the Darknet) relating to current numbers of data, users, website addresses, and traffic, while trying to refer to the most relevant data, yet indicating repetitive data over the years.

Thus, the study claims that based on a wide range of available data, it is somehow hard to form a coherent and reliable quantitative image that enables us to determine how deep the web is.

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How Lockdown Redefines Libraries; the Future Beyond the Pandemic

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Abstract: The Covid-19 pandemic has directly affected the operation of libraries, archives, museums and cultural organizations around the world. The operation of these organizations depends on the general policy pursued by each country, according to the risk of spreading around the virus. In particular, the Greek state has imposed, from the very beginning, a temporary ban on the operation of these organizations in conjunction with other precautionary measures, such as a temporary ban on the operation of all levels of education, as well as a temporary restriction on the movement of citizens. These are measures that have been implemented successively since mid-March 2020 and their validity has been renewed according to the recommendations of the National Committee for the Protection of Public Health.

This paper, written in the midst of the pandemic crisis and with the restrictive measures in Greece still in effect, aims to capture the new reality regarding the operation and the services provided by the Library of Piraeus Bank Group Cultural Foundation (PIOP), and especially the first thoughts for the next day, placing it in the general context formed on the basis of the current governmental decisions. It is a special library oriented to specific fields of research (economic and social history, agricultural economy and policy, industrial archaeology, museology, cultural management, intangible cultural heritage), which at the same time has a significant presence in the cultural life of the area where it is located (Kallithea, suburb of Athens, Greece).

Due to the pandemic, various issues arise that will concern the specific library, as well as similar organizations. One of them is related to the previous attempt of highlighting the social role of libraries, which needs to be adapted to the new conditions and possibly redefined. For example, social distancing, which people now keep in order to reduce the risk of transmitting the virus, would have serious repercussions on the operation of the library when the pandemic is over. A second one concerns how to provide remote access to the various collections and services that the library provides. Free availability of resources, open access to material, proper management of copyright stand out, while at the same times libraries should maintain the social and cultural benefits that they offer to their communities.

Keywords: Library (PIOP), pandemic, Covid-19, Coronavirus, lockdown, social role, social distancing, open access

How to Survive the Race against Time? Estonian Libraries During the COVID19 Outbreak

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Abstract: This study is conducted in the theoretical context of the social acceleration of time, being described by time-pressure and speed as the imperatives of contemporary life (Tomlinson, 2007; Rosa, 2013) that hinder well-considered decision-making (Levy, 2007) and increase ‘decay-rates’ of previous knowledge (Rosa, 2013: 7). While libraries and librarians are holding the reputation of reputable institutions and professionals, the issues related to the social acceleration of time are not leaving them untouched. As of the beginning of 2020, the COVID19 outbreak has posed even additional challenges, so that after (temporarily) closing doors in many countries, libraries have sought varying alternatives to quickly meet their visitors’ needs in ‘contact-free’ ways. Considering the vulnerable position of libraries as non-profit organizations depending on the financial status of their funding agencies, there is high time to map the ‘survival tactics’ of libraries and the changing work-paces of librarians, as both the intensity and duration of the COVID19 outbreak may cause unprecedented changes in libraries. Within our presentation, we discuss methods we have applied to map the situation of libraries in Estonia and introduce the preliminary results.

Firstly, to provide some overview of Estonian libraries open to the public (both the public and scientific libraries), we have mapped the situation of libraries during the COVID19 outbreak through March 13 – May 17 (since the declaration of the emergency situation on March 12, 2020). We gained an overview from the public online resources of all 545 libraries, whereas the most operative information was collected from libraries’ open Facebook sites (62% of all resources). Libraries have either focused on the work with collections (collection development, processing, storage) or additionally provide services (with the focus on lending books and other materials). Moreover, some ‘normalization’ of the libraries’ work has occurred: while in March, 45% of the libraries were lending books, this percentage has risen to 71% in April (during the QQML conference, we will also introduce developments from May).

Secondly, we have conducted several semi-structured interviews with librarians to better understand the work-pace of librarians before and during the situation of crisis. The preliminary results from qualitative content analysis indicate changes in the librarians’ work pace during the day, revealing significant differences whether one works in the library or the home office. Some tasks that are now more work-intensive than before (retrieving and packaging books for the readers, preparing work packages for those who work in the ‘home-office’), so the funding institutions’ impression about the decreased workload of librarians while the libraries are closed to the publics

can be misleading; hence the need to raise awareness of so-called 'invisible' tasks among the publics and funding agencies.

Keywords: emergency situation, Estonia, public libraries, social acceleration

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Human Dimension in Adopting Quality Management in Romanian Research Libraries: Librarians' Skills for Supporting Researchers' Visibility

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Abstract: This study focuses on quality management in Romanian libraries and the role of librarians in supporting research and researchers' visibility. By means of a range of specific tools, librarians must adopt the most efficient methods to ensure a continuum support in development of institutional digital repositories and, also, in dissemination of scientific informational content.

The structure of this paper is as follows: a brief theoretical framework and an empirical research. There are a range of appropriate generic models for quality development and Romanian research libraries have to choose the most efficient ones. The empirical data were collected by means of thirty completed questionnaires, a focus group and six semi-structured interviews with researchers in mathematics, industrial ecology, pharmaceutical technologies, organic chemistry, literature and history. The study concludes with a series of considerations for practice.

Keywords: libraries' quality management, Romanian research libraries, users, access to information, researchers' visibility, content analysis

43

Impact of Cultural Intelligence within Special Libraries: Focus Group Findings and Overall Results

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Abstract: As the information profession shifts, special librarians need to adjust their way of doing business to stay competitive. The market is global, and this impacts the service levels that information professionals provide. Special librarians must be culturally intelligent in order to work effectively to meet their user's needs. How are special librarians embracing cultural intelligence and embedding cultural intelligence within their practices? Cultural intelligence (CQ) is the capability to function effectively across various cultural contexts. In summer 2019, the researcher explored

the phenomena of cultural intelligence within special librarians and special libraries around the world. The purpose of this mixed methods research was to learn more about the level of cultural intelligence of special librarians, the application of cultural intelligence within special libraries, and views on how important cultural intelligence was within their organizations. The research study focused on those who currently worked in a specialized setting such as business, government or information centers around the world. A research survey was conducted with 148 respondents as part one which looked at the overall level of CQ of participants, viewpoints about the value and importance to their organizations and within their libraries and was reported in a former QQML journal article.

This article focuses on findings from part two of the research related to the focus group responses and overall results of the research project. Focus groups were conducted within two months after the survey completion with 11 participants that opted-in to provide additional input on this topic. The following selected questions were asked of participants: 1) How did you feel about cultural intelligence?, 2) What do you like best about the cultural intelligence model?, 3) What problems or challenges do you see with the application of cultural intelligence in special libraries?, 4) What has gone well due to cultural intelligence within your organization?, and 5) What is one change you would suggest to ensure cultural intelligence is embedded within your library? Participants from around the world who were members of the Special Libraries Association expressed rich responses within the focus groups. Problems and challenges of the application in special libraries were discussed further. Participants expressed examples of what went particularly well within their libraries when applying cultural intelligence. Participants also offered suggestions for changes they would make to ensure cultural intelligence is embedded and included within their organizations. These results are important as they offer insight into how special librarians can incorporate CQ into their daily practices and relevant application to diversity initiatives, inclusive excellence and continuing opportunities for understanding the diverse interactions we have daily.

44

IN-PROVE: Integrated Environment for the Effective Management of the Individual Procedures of the Modern Book Collections' Preservation

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Abstract: Long-term preservation of the modern Bohemical documents should be guaranteed by highly professional institutional system, and of course, by the strong and systematic support by the governmental and state bodies. Equally, it is important to lead all the individual activities under clear methodical guidance and long-term vision, which was the main principle used in the implementation of the research project called "IN-PROVE: the creation of the integrated environment for the surveys, protection, research and recording of the modern library documents".

The most valuable output of the project IN-PROVE is the creation of the special integrated environment for the professional everyday work with main conservation

collections of the bohemical documents stored in the Czech libraries (especially in the libraries with the legal deposit duties – National Library of the Czech Republic, Moravian Library in Brno and the Research Library in Olomouc).

The integrated environment main task is to incorporate so far independently standing software tools e.g. Digitization Registry, Virtual Deposit Library, Deacidification Registry etc., which were developed in the Czech Republic since 2010 with the goal to simplify various everyday processes of modern library collection management and preservation. After the integration to the one environment it will be easily possible to obtain relevant information about the uniqueness, physical condition, planned or completed digitization or deacidification for planning and decision making in the single user interface. This is crucial especially for the communication about both the financial and the organizational support of all the preservation activities with the Ministry of Culture, other culture heritage institutions and state bodies, which need specific and exact information. The developed environment provide also a good way how to save money in the institutional level – for example when your library realized, that the book has been digitized in the another library yet, you should not to digitize it again and just asked for the e-copy. Complete documentation of the system (user and administrator manual), the whole source code (based on the GNU-GPL open license) will be freely available to reuse this idea worldwide.

45

Information Culture in the Age of Coronavirus. Study of Students' Opinions as Potential Library Users

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Abstract: Human information behavior is an integral part of interdisciplinary research in information culture. The aim of the article is to examine students' information behaviors as potential library users. For this purpose, surveys were conducted among students of the University of Silesia in the fields of: library and information science, and information architecture. The survey questions concerned such issues as: (1) the impact of the library on individuals, (2) impact on the library's parent institution or community, (3) social impact (in accordance with ISO 16439: 2014 Information and documentation - Methods and procedures for assessing the impact of libraries). The results of the surveys were thoroughly analyzed. The promotion of the role and value of libraries for learning and research, education and culture, social and economic life was also discussed. It was emphasized that in a culturally diverse society libraries enable different groups to preserve their own cultural heritage, thus encouraging diversity. A special case of social impact concerns the potential value of the library for future generations, thanks to the preservation of documentary cultural heritage. Conclusions are presented at the end of the article.

Information ethics observance, information literacy skills and use of library information materials by undergraduates in two universities in Osun and Oyo states, Nigeria

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Abstract. The use of Library information material as an aspect of users' studies is a vital aid for effective planning and management in academic libraries; however, literature reveals that the use of library information material is not at optimal level. It is therefore disheartening to note that because information ethics is not a well-known concept among undergraduates and information literacy, while a common phenomenon, is rarely put into use by them, they do not maximize the output of the efforts put in by library personnel who ensure that information materials are available for use as and when due. This study therefore investigated information ethics and information literacy skills in relation to use of library information materials in Obafemi Awolowo University (OAU) and University of Ibadan (UI) both in South-west, Nigeria.

Descriptive survey research design of the correlational type was adopted. Three faculties each were purposively selected with a study population of 34,000. Proportionate random sampling technique was employed using a sampling percentage of 5% to give a sample size of 404. The research instrument adapted for this study was the questionnaire which were administered and collected by the researcher together with four trained research assistants.

The study revealed that information ethics observance of undergraduates in both universities was prominently significant - 180 (80.8%) in OAU and 109 (73.6%) in UI. Furthermore, the undergraduates were found to possess a moderate level of information literacy skills - 119 (53.4%) in OAU and 76 (51.4%) in UI. Further results revealed that Internet facilities and textbooks were the library information materials most frequently used by the undergraduates in both universities majorly for examination purposes- 222 (90.6%) in OAU and 133 (89.9%) in UI and that both independent variables affected the use of library information materials by undergraduates in the universities under review and information literacy skills (53.4%) contributed more than information ethics (77.2%).

In conclusion, the purposes for which undergraduates used library information materials was too minimal compared to numerous ways library information materials could be used. For increased use of library information materials by undergraduates, the university administrators must introduce courses on information ethics and information literacy to undergraduates. The Library management should also create regular awareness to undergraduates on the collections of the library and make the library environment conducive so they will always resort to the library as a first port of call for their information needs.

Keywords: information ethics, information literacy skills, use of, library information materials, undergraduates,

Information needs, information and communication technology skills and use of cloud computing by undergraduates in selected private universities in south-west Nigeria

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Abstract. The place of technology in today’s digital and knowledge economy cannot be over-emphasised. Cloud computing is one of the many technologies that avails users the opportunity to manage, store, manipulate information and data in meeting various needs per time. This study therefore investigated information needs, Information and Communication Technology skills and use of cloud computing by undergraduates in selected private universities in South West, Nigeria. Descriptive survey research design was adopted. Data was collected from a simple random selected 373 respondents from the three selected (Bowen, Crescent and Ajayi Crowther) private universities in South West, Nigeria, and analysed using descriptive statistics: frequency count and percentage, mean and standard deviation, and inferential statistics: Pearson and multiple regression analysis.

Findings of the study revealed, among others, that economic, industrial attachment and employment, political, sports and entertainment, academic and research and health information respectively encompass the information needs of the undergraduates in the selected private universities in South-West, Nigeria. The level of ICT skills possessed by these undergraduates is very low and the level of awareness of cloud computing by undergraduates is high. Findings from the tested hypotheses showed that ICT skills ($p=0.008$, $r=0.146$) has weak positive significant relationship with use of cloud computing by undergraduates in private universities, South West Nigeria, ICT skills and information needs ($p=0.000$, $R=0.124$, $F= 23.539$) jointly predict and influence undergraduates use of cloud computing by undergraduates in private universities, South West Nigeria, and information needs ($p=0.000$, $r=0.264$) has weak positive significant relationship with use of cloud computing by undergraduates in selected private universities, South West Nigeria.

The study concluded that use of cloud computing by undergraduates in the selected private universities in South West, Nigeria is connected with the ICT skills possessed and their information needs. However, other factors could be accountable for their use of cloud computing. Among others, this study recommended that the private universities’ managements and other universities should encourage and train their students on applicable ICT skills to the workings of cloud computing to enable them harness the advantages of cloud computing increasingly.

Keywords: Information needs, Information and Communication Technology skills, use of cloud computing, private universities undergraduates, South West, Nigeria

Instructional Design and Librarianship: Navigating the Necessary Skills for our Changing Library Landscape

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Abstract: Instructional design librarians have quickly become of large demand in the library and information science (LIS) world. Yet, there are very few librarians with this title and even more concerning is if these skills are being taught in library school. This paper will showcase survey results from 40 librarians who identify as instructional design librarians and highlight their backgrounds, skills, and educational training for this role. Understanding what is, and is not, being taught about instructional design, library instruction, and librarianship is of key importance as instructional design librarians are frequently sought after. This paper will highlight those aforementioned areas of study to help better inform the LIS world about these positions and their needs.

The Involvement of the National Medical Library in Increasing Health Literacy in Collaboration with the Network of Public Libraries in the Czech Republic

48

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Abstract: The Czech Republic ranks below the average of eight selected European countries in health literacy not only overall, but also in individual areas. An especially unfavourable situation exists in the area of health support, i.e. in the ability to obtain information related to health-enhancing behaviour, the ability to evaluate and interpret it, and the ability to behave accordingly. More attention has been paid to the issue of health literacy and increasing it in Czech health policies, especially over the past five years, within the framework of the following national programmes: Health for All, Health 2020 – National Strategy for Health Protection and Promotion and Disease Prevention, and the Strategic Framework for Health Care Development in the Czech Republic by 2030.

The library's priorities include the creation and development of the MedLike portal (www.medlike.cz) and educational activities in support of health literacy. The MedLike portal provides health information from pre-selected reliable national sources. The MedLike portal's own web-based application, built on top of the Couch DB18 database using the Flask web framework, was created at the NLK. The portal's structure consists of information sources (annotated links) that are sorted according to topic (disease, group of diseases, health condition...). The topic belongs to a category (body parts, body systems, groups of diseases) or a sub-category (body organ). The information source can be an article, an audio or video file, a book, a website, or a clinical study. Except for books, all linked sources are freely accessible over the internet. At the end of 2018, the NLK developed MedLikeAdmin, its own administrative application to administer the portal's content and to support the desired workflow.

The portal's content is filed according to the methodology of selecting information sources. The selection of reliable sources is done using the library's own quality-assessment methodology. This presentation focuses on this methodology according to whose eight parameters for quality assessment links to significant, verifiable and reliable information are selected from a large amount of available national information. The content is updated on an ongoing basis when new information becomes available. A check of URL addresses takes place regularly every six months. As of 2020, the portal contains 25 categories with more than 100 topics that include around 6,200 reliable sources of information about health and diseases. The topics and categories are sorted according to the Medical Subject Headings thesaurus. The selection of topics is done according to an NLK-created methodology based on disease incidence in the Czech Republic and current demand, while taking the MedlinePlus portal into account. Google Analytics is used to gather access statistics. Since its launch in 2018, the portal has recorded approximately 6,500 users and 9,500 visits.

To increase the level of information awareness and to improve the public's attitude towards health and health care, the National Medical Library initiated pilot seminars in 2019 which took place in different types of public libraries. The seminars took place in five libraries; overall, 18 lectures were organised, attended by 95 participants. The seminar programme was divided into three units. The first unit was a theoretical lecture during which health literacy and media literacy were explained and whose objective was to help strengthen the audience's awareness of the importance of critical selection of information-search results. The second unit included an introduction to the MedLike portal, with links to reliable sources of information about health and diseases and a presentation of the quality criteria according to which the selection of links is filtered. In the final, third unit, participants tested their own ability to assess the quality of sources of information about health and diseases by doing exercises according to a self-testing methodology. Methodological tools developed at the NLK were used: a quality-assessment table based on the C.R.A.P. test and a worksheet/form entitled Formal and Subjective Criteria for the Quality Assessment of Information Sources. Afterwards, an evaluation and comparison of the results took place. Currently, the NLK is preparing courses on the topic of critical assessment of information on the internet with the possibility of self-study in a new type of online education.

The purposes of all activities of our library were to increase the public's level of awareness of the MedLike portal, to motivate librarians to collaborate in supporting health literacy, and to provide the participants with know-how in recognising a quality piece of information.

Keywords: medical librarian, lifelong learning, Czech Republic, medical libraries, health literacy, information, health literacy, public library, web-portal MedLike

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Kick Start your Assessment Project with User Experience Methods

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Abstract: Over the past ten years, the fields of user experience (UX) and library assessment have grown increasingly close to one another. Both library UX and assessment professionals are involved in data-informed decision making, and as the fields grow closer, it is critical to share best practices for building empathy, expanding understanding of user needs, and recommending impactful solutions. The area of UX offers many dynamic methods for assessment professionals to set assumptions aside and evaluate library services with people in mind. In this session, you will learn how one institution applied UX exercises such as persona-building, user interviews, and card sorting to keep the user at the center when kicking starting assessment projects.

Keywords: user experience, personas, card-sorting, interviewing, qualitative methods, library assessment

Leadership and Assessment of the School Library: A Qualitative and Quantitative Analysis in Two Portuguese Schools

50

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Abstract: Since 2009, School Libraries (SL) in Portugal have a Teacher Librarian (TL) responsible for the development of the SL activities programme. And in 2010 it was conceived and implemented a self-evaluation model, by the National School Libraries Network, a service of the Ministry of Education. Key concepts such as value, impact and evidence-based practice have supported the way the model was conceived (Bastos, Conde & Martins, 2011). Resources and processes are important only in the measure of their added value and contribution to developing teaching and learning. At the same time, multiple institutional initiatives to promote the modernization of primary schools and the change and innovation in teachers' pedagogical practices, like the National Reading Plan, have had the School Library as a relevant partner. In this context, it is important to look at the role of school libraries (SL), and specifically how the teacher librarian is facing these issues and how he/she is collaborating with other teachers. We know that leadership is based on complex relationships and that different contexts and school priorities can influence the TL work (Fullan, 2001; Haycock, 2010). So it is important to understand the pivotal role of teacher librarians in those processes and how their work and leadership is recognised by different school actors.

In this paper we intend to present the results of a research study, specifically focused on the way school leaders (principals), primary classroom teachers and teacher librarians from two grouping of schools in the south region of Portugal look at the leadership role of the TL, his/her role in SL assessment and the value of the self-assessment process. A survey was applied to 40 primary school teachers. Two

principals, two assistant professors of principals, and four teacher librarians from the grouping of schools were submitted to interviews. The quantitative and qualitative data were analysed and results show some differences between the two primary schools mainly concerned with time management and availability of human and financial resources. All respondents considered that the TL must have a strong leadership profile. Personal traits were pointed out for the exercise of this leadership: motivation; mobilization capacity; initiative; conciliation; persistence. Equally worthy of mention was the vindication of an engaging and non-authoritarian community leadership. TL also plays an important role in promoting the SL and showing assessment results to different stakeholders.

Keywords: school library, teacher librarian leadership, assessment of school libraries

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Library Anxiety among Users of a Multinational Academic Environment: The Case Study of a Major European University Library

51

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Abstract: The purpose of this paper is to examine the library anxiety phenomenon among graduate students of a major European university library. Library anxiety can be summed up as the feeling of being stressed while using the library. It is the fear that someone's library skills are inadequate or the feeling that seeking out help would only reveal his/hers inadequacy. In this framework, this research attempts to examine the factors that lead to the library anxiety phenomenon. The paper claims that information literacy could be the keystone to address this phenomenon, as it is being widely and increasingly recognized as an important educational factor, which helps to reduce the stressful environment that information overload society creates.

In this research, a quantitative approach has been employed using a questionnaire survey as a tool for data collection. More specifically, a 39-item modified version of Bostick's (1992) Library Anxiety Scale was tested among the library users of a major European university library. Overall, 200 questionnaires were distributed and of these, 47 questionnaires were successfully returned with a response rate of 23,5%. Data was analyzed using IBM SPSS where percentages, charts and tables were obtained to present and interpret data.

The review reports interesting and important research findings, which are analyzed accordingly. More specifically, the results of the survey present several factors and barriers that need to be thoroughly examined and discussed. A new barrier is presented and examined that can be briefly referred as the "comparisons between library patrons" barrier. Based on the findings, this study makes recommendations on the critical role that librarians can play in reducing or even eliminating this phenomenon, by promoting information literacy and create lifelong learners. By

encouraging library patrons to build more advanced critical thinking, evaluation skills and the confidence to draw their own valid information, libraries play a vital part in changing the information seeking behavior of their library patrons, so that they can utilize the library effectively.

The novelty of this research is that, to the best of our knowledge, this is the first review that aims to explore in depth the correlation between library anxiety and information literacy in a multilingual, multinational and multicultural academic environment, as the one examined in our case. The relevant literature reviewed until now is mostly limited in undergraduate students and only a few refer to international graduate students. This survey was conducted in an academic environment, which mostly consists of international PhD researchers, thus it represents a really interesting students-based sample to explore.

Keywords: library anxiety, information literacy, information seeking behavior, information overload, critical thinking, academic libraries, Europe

The Library as Information Tool

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52

Abstract: We live in a knowledge-based society; therefore, information can be accessed anytime anywhere. Access to information is a fundamental human right, and libraries must satisfy this need, thus contributing to improving education, developing new skills or decision making. In this sense, libraries must continuously develop, reinvent themselves, create new or improve existing services, invest in infrastructure, technology, training. A result of these investments aimed at developing traditional libraries is the digital library, which grants access to quality information, filtered and processed by experts in the field.

Keywords: university library, digital library, virtual library, digital collections, information tools, Rolinest

A Literature Review for the Implementation of Mobile Technologies in Cultural Heritage Organizations

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Abstract: Mobile devices have an important role in society in that they have already supplanted other means of information as the primary preference for users to find the latest news, entertainment, and educational information. Increasingly, cultural heritage organizations have implemented mobile technologies to provide visitors with an empowered cultural experience. Choosing an adequate formal process for mobile application design and implementation has become an important success requirement. However, there is little, if any, review research analyzing and synthesizing existing models and frameworks for designing mobile learning experiences and environments. This work presents a systematic review which will categorize and synthesize information from several studies that provide design frameworks or conceptual models in order to implement mobile experiences into the presentations from cultural heritage organizations. This review will provide insights and may inform evaluation, design, and development of mobile experiences which may prove invaluable to engagement practitioners as well as mobile application designers and researchers who are interested in providing meaningful mobile learning experiences and environments based on sound theoretical foundations.

53

Locally Sourced: Identifying Knowledge Practices from the ACRL Framework within Professional Contexts

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Abstract: In 2016, *The Association of College and Research Libraries (ACRL) Framework for Information Literacy in Higher Education* introduced a series of recommended information literacy knowledge practices. The ACRL stressed that these recommendations, which it organized into six interrelated core concept frames, were not prescriptive. Instead, the ACRL encouraged instructional librarians at academic institutions to collaborate with faculty and other stakeholders to develop localized learning outcomes relevant to the specific needs of their learning communities.

This mixed methods case study investigates the ways that mid-career alumni of a polytechnic university engage with the ACRL's recommended knowledge practices within their unique professional contexts. The study surveys alumni engaged in degree-related professional practice and quantifies the frequency with which respondents have implemented specified ACRL knowledge practices within the workplace. The study's qualitative component provides specific perceptions and descriptions of the most frequently utilized ACRL knowledge practices. Data from these follow-up interviews will inform the development of the university library's instructional objectives for students enrolled in related majors.

By understanding the workplace knowledge practices currently implemented by the professional counterparts of students, instructional librarians can effectively articulate relevant learning objectives for students enrolled in advanced undergraduate courses.

A Longitudinal Study of the Online Database Usage of De La Salle University Libraries: Basis for Future Subscription Decisions

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Abstract: No library is ever complete. And with the advent of technology not to mention the increasing amount of information and knowledge available online and to provide a more comprehensive collection to library users, more and more libraries have decided to subscribe to online resources. As this will also save physical spaces, libraries now venture into online database subscriptions. However, due to increasing demands, it is observed that the subscription costs have drastically increased, making it more expensive and challenging for libraries to maintain. Considering the information needs and demands of the academic community and the usage of these databases, libraries resort to subscribing to the database despite price increase or cancelling their subscriptions due to unaffordability. De La Salle University Libraries has been experiencing the same dilemmas. The study presents how the usage of online databases has changed overtime to forecast users needs. Moreover, this study aims to identify the performance of the online databases based on its usage and its relation to the subscription costs over the past five years. Furthermore, the results of the study will help the DLSU Libraries in future subscription and budgetary concerns and decisions.

Keywords: longitudinal study, online resources, usage

54

MarLiNet Highlights the Maritime Cultural Heritage

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Abstract: The presentation focuses on the contribution of the Maritime Libraries Network (MarLiNet) to highlighting the maritime and naval cultural heritage of

Greece. The common goal of the network is the compilation of the Greek maritime wealth along with its promotion and dissemination. The 8 libraries that constitute the Network have at their disposal, collections on shipping, marine sciences, naval architecture and shipbuilding. Most of them possess invaluable historical material in the maritime field. Three of the MarLiNet members present their high-value historical collections as a distinctive contribution to the promotion of Greece's vast maritime cultural heritage.

These three libraries are

1. *Aikaterini Laskaridis Foundation Library*
2. *Hellenic Maritime Museum Library*
3. *Naval History Department Library (Hellenic Navy)*

In particular, the Aikaterini Laskaridis Foundation Library has a maritime section, which includes, Baron Leo Delwaide's Maritime Law Library with 5.500 titles, books printed from the early 16th century until the mid-19th century, including rare and valuable editions. The Foundation's Nelson Collection also contains personal items, dozens of letters and evidence associated with Admiral Horatio Nelson and is the largest collection outside the United Kingdom. The collection includes 82 autograph letters from Lord Nelson, dozens of newspapers of the time mentioning Nelson's victories, many of the Admiral's personal belongings, some 1,500 books on Nelson and the Napoleonic wars, and a collection of noteworthy paintings, some of them depicting Nelson himself, some of his battles and his death. The collection includes some 30 models of various types of bone or ivory warships made by French prisoners of the Napoleonic wars.

The Historical Archive of the Hellenic Maritime Museum Library is one of the focal points of the Museum itself. Concurrently with the establishment of the latter in 1949, the collection of primary archive material began having as main object to salvage, preserve, record, study and document events related to the maritime history and tradition of the Greek nation. The archival material comes mainly from donations by historical families and their descendants and by members of the Museum. It includes more than 25,000 pages and extends from the time of the Greek War of Independence until the end of the 20th century. A large part of the archive consists of individual documents, mainly manuscripts, covering the various aspects of the naval but also the political, economic and social life of Greeks over the centuries.

Last but not least is the Historical Archive of Naval History Department Library which appertains to the Hellenic Navy. The archive originates either from material from the action of warships and of the services of the Hellenic Navy themselves or from private donations and particularly from retired Navy personnel and their descendants. It dates back to 1897 and extends to today. The historical archive includes unique archive collections such as the Archive of Admiral Alexandros Sakellariou HRN (Chief of the Hellenic Navy General Staff during the first phase of the World War II).

In addition, the Historical Archives of the Naval History Department includes a vast number of reports derived by the Greek Royal Navy (naval services and war ships) with details from the operations they were involved in during WW II, as well as the official service books and documents of those Greek warships that played a crucial role in the nation's struggles during the first half of the 20th century. Armored Cruiser "GEORGIOS AVEROF", the legendary ship that defeated the Ottoman fleet during the naval battles of "Elli" (at Hellespont Dardanelles' straits) and of "Lemnos" (Greek island at North-east Aegean Sea), the destroyer "HMS ADRIAS", the ship that although cut in two, being hit by a mine, was returned by its captain and crew to its

naval base in Alexandria-Egypt, as well as the Greek submarines that inflicted great damages to the enemy during the World War II are only some examples of ships whose records are included in the Archives. These also include the audiovisual Section with microfilm photographic and video material, containing unique historical data coming from various warships or services of the Navy. It is also important to mention that this Section includes a large number of interviews given by veterans who had served as officers and petty officers of the Hellenic Navy during World War II. These interviews have been taken from specialized staff of the Naval History Department, which now possesses a large and serious audio visual archive of what is called "primary history" (history that is collected from oral testimonies).

Additionally, the presentation presents the results from a pilot questionnaire survey addressed to a limited number of users of the three libraries which has served as a test for designing a final questionnaire in order to evaluate and measure the use and user perception of these historical collections.

Keywords: Maritime Libraries Network, maritime cultural heritage, historical archives, naval history, historical collections, pilot questionnaire

Measuring Digital Transformation: A Maturity Model as an Approach to Reunite the Library and Archives of Social Democracy of the Friedrich-Ebert-Stiftung

56

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Abstract: For years the library and the archives of social democracy (AdsD) of the Friedrich-Ebert-Stiftung (FES) are working in close cooperation but were divided into two separate departments. For reasons of efficiency, in 2018 it was decided to reunite the both of them. This poster outlines how the digital transformation as a major challenge for both, library and archives is addressed within this process.

Besides a phase of modelling business processes a model for measuring the maturity of the digital transformation was developed for libraries and archives as well. The model covers four dimensions: technologies, processes, organization, employees. A six-step-range ordinal scale identifies strengths and weaknesses within these dimensions.

The digital transformation maturity model gives insight into the libraries and the archives status to consolidate and prioritise next steps. The poster will discuss this evaluation and thus give some practical insight into the process.

As a result, services are shaped and redundancies are abolished. Moreover a knowledge transfer was put into effect which especially with regard to the demographic change is highly valuable for the organisation as a whole.

Keywords: digital transformation; maturity model; management

National Bibliography Web-based: Potential Technologies for Bibliographic Heritage Diffusion

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Abstract: This paper exams potential technologies to improve Current National Bibliography. From perspectives concerned to diffusion of national bibliographic heritage from IFLA 2008 guidelines, it aims to analyze three categories of applicable technologies: participatory, collaborative, and disruptive technologies for the National Bibliography Web-based. From literature review, it explains that with the expansion of information and communication technologies, National Bibliographic Agencies can integrate technological resources within Web Information System Architecture and expand their ways to improve their bibliographic work. In this sense, the adoption of technologies may improve multimodal communication process with its users in a privileged way to access to the most diverse national bibliographic resources by participating and collaborating to national bibliography use and diffusion.

Keywords: current national bibliography web-based, participatory technology, collaborative technology, disruptive technology, national bibliographic heritage diffusion

57

NFC - Enabled Library Management Application

Projes Roy

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Abstract: The basic housekeeping operation of the library is book management. Many libraries already integrated with barcode and radio frequency identification (RFID) technologies. RFID is an example of automatic identification and data capture. It was introduced to overcome quality of clarity in barcode technology and lead to smooth and effective transactions. This project deals with building a 'NFC integrated library management system android application' using an innovative and upcoming technology called Near Field Communication (NFC). This technology is embedded in a few selected mobile devices. This application mainly focuses on transactions, borrowing and returning of library books using the NFC technology in order to make libraries technologically advanced, economical and user friendly. This project mainly focused on low cost library automation.

Keywords: RFID (Radio Frequency and Identification System), NFC (Near Field Application), LMS (Library Management System), QR code, Android, mobile communications, HF (High Frequency), algorithm, books check-in, books check-out, library due

No Library is an Island: How the Academic Libraries of a Public University at the Epicenter of a Pandemic Came to the Conclusion that Services Had to Transition to Remote-only

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Abstract: This paper constructs a narrative timeline of the events that occurred during spring semester 2020 as the disruption and uncertainty unleashed by the COVID-19 pandemic made it imperative for an academic library at a public college in Jamaica, Queens transition their in-person service model to remote learning while simultaneously navigate being designated as 'essential' personnel. Fortunately, this college is a member of a municipal university system and as such did not face these challenges alone. During this semester, New York City went from zero confirmed cases to being the epicenter of the country with the largest outbreak on the planet. The virus placed this public university in a dilemma; how to continue providing the services and physical spaces their students relied upon while at the same time ensuring a safe environment for the academic community as a whole. The efforts of these librarians, and the requisite leadership from state, municipal, university, and college administration, have to be placed within the prevailing context of insufficient coordination and communication provided by the Federal government and the CDC. The dialogue that took place within the university was necessary, and ultimately, successful in determining a remote-learning model would be consistently applied to classrooms and libraries across CUNY. With this case study we contend membership in a consortium unique to such institutions as the City University of New York (CUNY) was essential for maintaining both relevant services and safety at the level of the individual campus. We present this case study as an opportunity for reflective assessment of what resources were in place, as well as those that were needed, in service of a highly impacted population.

58

Perspectives on Data Reuse from the Field of Natural Hazards Engineering

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Abstract: Amongst the measures of the scholarly impact of data, citations indicate data reuse. However, data citations are difficult to track, and tallying them does not capture how the data was reused, which can take different forms. Answering these questions can inform and enhance functions and operational decisions in open repositories.

DesignSafe-CI (<https://www.designsafe-ci.org/>) is an open data platform currently hosting ~10 terabytes of natural hazards engineering published datasets. Generally large and structurally complex, the datasets originate from experiments, simulations, and field research projects. To learn if and how the data are reused, the data librarian and the lead engineering investigator designed a mixed methods approach.

Collaborating with natural hazards researchers the team first identified types of data citations:

1. Authors cite original data that they create.
2. Data reuse by creators for continuation of the same research project.
3. Data reuse by creators on different research projects.
4. Data reuse by others than their creators.

Following we implemented Google Scholar alerts for DesignSafe-CI citations. Up to date we reviewed ~200 papers (2018-March 2020), logged the citations in Zotero, and annotate the corresponding citation type. Annotation requires understanding the research methods used to discern the purposes of the citations. We also record if the citation is “good” or “bad.” The former use DOIs to point to the datasets landing pages and the latter don’t. Last, we interviewed authors of papers with citation types 2,3, and 4 about their experiences reusing data.

Citation counts increase every year. 63 % of total citations for all years are type 1 while 36 % correspond to reuse types. In 2019, types 2 to 4 surpassed the number of original data citations, and in the first quarter of 2020 type 1 counts exceed those of previous years.

The interviews revealed the researchers’ preferences, such as reusing datasets that they learn about through journals and conferences, and how different levels of effort required to reuse datasets relate to their understandability, documentation, and the clarity of their interface presentation. We also learned which data types are most reused, and the kinds of research conducted with them. The study also surfaced the timelines for data reuse after publication, highlighting the lasting value of datasets that continue being used decades after their publication. While acknowledging the research potential of data reuse, researchers candidly expressed concerns about the lack of academic incentives to publish and reuse data. They also needed to better understand the DOI technology and its benefits. All agree about the importance of accessing the datasets online.

Ongoing results are used to inform DesignSafe-CI developments. To improve discoverability and stimulate data reuse, we implemented SEO strategies and interface features to enhance data access. In 2019 we started communicating good citation practices more broadly (e.x. <https://www.designsafe-ci.org/rw/impact-of-data-reuse/>). We are noticing improvements, in 2018-2019, 44% of the citations were bad and since January 2020, 85% are good. We expanded our methodology to learn more details about the data impact and suggest that the method is generalizable to other data and repositories types.

59

Portrait of Librarians in Public Libraries

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Abstract: Librarians are the main resource and basis for the successful functioning of a library. The paper deals with the educational and age structure of employees in public libraries in Belgrade, the capital of Serbia. There is also a brief overview of the educational and age structure of school and special libraries in Belgrade. The

analyzed data were obtained from the Network of Libraries of Serbia, maintained by the Belgrade City Library as the home library for the City of Belgrade.

The survey covered a period of ten years, the cross-section of the situation was made in relation to 2008 and 2018. The analysis of educational structure includes librarians with a high school diploma as well as with a university degree. Compared to 2008, in 2018 there is an increase in the number of employees who graduated from private universities. There is a decrease in the number of employees in libraries, as one of the consequences of the 2014 ban on public sector employment. Therefore, the average age of library staff is higher than in the previous period. The obtained results are also compared with the general trends, first of all, in higher education. The results obtained for public libraries in Belgrade are compared with available data for EU countries.

In this paper, I try to point out the lack of clear strategy in the field of librarianship and libraries themselves. The problem starts with the lack of order in education itself, especially at universities, but also in society itself and its understanding of librarianship.

Keywords: public libraries, education, librarian

Pub(lic) Opinion Crawl: Lowering Barriers for Qualitative Library Assessment

60

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Abstract: Ever have a focus group where no one attended? Recruitment for qualitative research studies can be time-consuming, and still result in low participation. A consistent hurdle for conducting focus groups and usability testing is participant recruitment. In addition, the logistics and organization of usability testing and focus groups often require more than one person's experience and expertise. As a result, qualitative library assessment becomes so daunting that it doesn't happen. How do you improve the effort-to-outcome ratio and facilitate data collection and assessment in academic libraries?

To address these concerns librarians at San Diego State University developed a qualitative research event. The event allowed researchers with various library related research questions to run independent investigations simultaneously. They were able to use the same pool of participants and thus saved time, and money.

They didn't each have to market, recruit and plan the focus groups. The event was open to all librarians with a qualitative research need that required student study participants, regardless of the topic of research. Researchers are then able to focus on their study and their methodology and not logistics. The Pub(lic Opinion) Crawl planning team created a festive atmosphere for study participants and were able to reduce the barriers for individual researchers.

This case study will discuss how SDSU Librarians used collaboration to plan and execute multiple qualitative research studies at one time, thus decreasing the investment in time and funding, and reducing the psychological obstacles inherent to initiating an assessment project for individuals. We will explore the development of the idea for this event, the processes and pitfalls encountered when planning and

funding the event, and the results and lessons learned. The audience will come away with recommendations for those who wish to attempt a similar project.

Keywords: focus groups, usability testing, qualitative research methods, data collection, case study, assessment, academic libraries, library service assessment, best practices

The Rare Book and Manuscript CRAI Library of the University of Barcelona inside the Process Management Model

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Abstract: The great importance of the heritage collection of the CRAI Library of the University of Barcelona gives added value to the institution, and it is reflected in and defined by the Ancient Book and Manuscript CRAI Library. Its basic functions are the preservation, the description and the sharing of the ancient collections. They include manuscripts from the 10th century to the 19th, the incunable collection, printed books up to the year 1820 and collections of parchments and engravings.

The process management model of the CRAI of the UB, which is based on the EFQM model, and the new Strategic Plan Iter 2020, provides the necessary tools to design an improvement action plan and concrete policies to preserve, conserve, provide a description and facilitate access to the great heritage collection of the University of Barcelona. It is well expressed by the motto of the second strategic goal “To preserve what is unique”.

61

Relationship Analysis between Children Interests and Their Positive Emotions for Mobile Libraries' Community Development in a Tsunami Area

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Abstract: During our refuge life caused by the Tsunami in Japan on 11th March 2011, the children have visited the mobile libraries. Our experiences recommend a community development with a focus on children positive emotions by using the mobile libraries against the negative context. However, children have various interests such as art, media and people even during their refuge life. In addition, few studies have not focused on relationships between the children interests and the children positive emotions. Therefore, this study proposes a relationship analysis to classify the children interests, which strengthens the children positive emotions during their refuge life. Data is collected by a questionnaire for all elementary and junior high school students in Ishinomaki City, 11029 children, from five to fifteen years old within two years after the Tsunami in 2011, Japan. A combination of factor loading

and text mining classifies the children interests according to four processing: 1. Grasp the structure of data, 2. Extraction of latent factors, 3. Classification of children interests into several types and 4. Connect free writing data to the children interests by text mining. Thus, both quantitative and qualitative outputs are combined by the relationship analysis. The interests of 11029 children are classified into 32 types. The community building by the mobile libraries ought to consider the 32 types, counting on not only the libraries' property but also people such as children families and friends. In addition, comparing the relationships of the children in non-Tsunami area, Tokyo, results in that 16 types are with specific in the Tsunami area.

Keywords: mobile library, relationship analysis, combining quantitative and qualitative outputs, children interests, art, media, people, children positive emotions, refuge life, Tsunami

Research and University Libraries as Future Scientific Publishers

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62

Abstract: Publishing is a set of activities for making people thoughts and ideas available to the public and the publisher is an individual or organization that undertakes the publishing process management and making available authors creation by employing financial capital, manpower, equipment and etc. In the past, only publishers could produce and publish human thoughts and ideas, especially in print format and distribute them among public, and others were the users of published works, but in recent decades, according to ICT developments and the increasing use of that as well as the Internet, has expanded the domain of content producers and publishers. Nowadays, many people and organizations are capable of producing and publishing content in text, audio-visual, multimedia, digital media, and so on. In fact, the publishing activity is not limited to specific organizations, which were called publishers traditionally; all people, organizations and institutions by Internet technology especially Web 2, are information producers/ publishers and consumers simultaneously. Libraries have access to information as well as researchers and elites, have an opportunity of being publisher and publishing is a function that has boomed in libraries recently and. Publishing of digital content and research activities and dissertations, scientific productions of faculty members, publication of scientific journals and monographs have been the focus of libraries. In fact, library publishing refers to the set of activities led libraries, especially academic and research libraries, to support the creation and dissemination of scholarly, creative and/or educational works. The present paper deals with the modern function of academic and research libraries, the "Library as Publisher", its importance and benefits, and the influence factors of the formation and development of this function. Also the role of librarians and the skills which they need are discussed.

Keywords: publishing, publisher, research library, university library, information technology

The Role of Information Services in Graduate Business and Law Teaching: Advances in a Qualitative Research at ESADE Business & Law School

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Abstract: This work will share the progress in a qualitative study on the role of information services in postgraduate teaching in business and law in an institution located in the region of Catalonia, Spain. This work aims to complement with qualitative strategies the traditional quantitative data on the use/needs of information and/or satisfaction with library services by teachers. In summer 2019 six in-depth interviews, focused on how master's and doctoral professors teach, were conducted at ESADE in order to understand the role of information services in graduate teaching. This paper will report the initial phase of analysis of the interviews which was carried out from grounded theory perspective, specifically focusing for this advance report in open coding and the consequent rooting of both citations and codes to develop categories or code families. Excel PivotTables were used to organize the analyzed data. The results show that graduate teaching develops around 1. the teaching strategies that the professors consider appropriate to teach his subject, 2. how the use of information plays a leading role in getting students to learn 3. the content considered in the educational objectives of the subject matter 4 the role of Information and Communication Technologies have a teaching-learning facilitator 5. the teacher from the point of view of his personal history as a professor, and how his teaching and his research articulates when promoting learning 6. Academic programs of the institution and 7. the professor institutional appreciation that gives meaning to their effort to promote learning in students in a specific university context. This research report of advance shows that the role of information in support of teaching is fundamental for professors and is articulated with the teaching style of each of them and the discipline he/she teaches within the framework of an institutional context. This analysis should be complemented in the future by the focused and axial coding in order to consolidate the qualitative model on the role of information services in ESADE's graduate degrees teaching

Keywords: role of information in graduate teaching, graduate business teaching, graduate law teaching, library user studies, research in libraries, qualitative studies, grounded theory

Special Libraries in the 21st Century: A Case Study at the National Archaeological Museum's Library (Spain)

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Abstract: Closed in May 2008, the most important archaeological library in Spain has been re-opened in June 2019. The National Archaeological Museum's Library is now open to readers aged 18 and over who need to use its library collections and services. Focused on supporting research and teaching activities, the Library aims to become a reference centre for university academic staff, researchers and students interested in Archaeology, History, Numismatics and Museum studies.

In this line, this paper is intended to identify special libraries' current situation by a strength and weakness analysis, which will help special librarians face today challenges as information professionals.

Keywords: special libraries, National Archaeological Museum, Spain

Students Assessment about Quality of Library Services at Slovenian Public Universities

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Abstract: The Slovenian Quality Assurance Agency for Higher Education (hereinafter: the Agency) assess the compliance with the conditions for the accreditation of higher education institutions and study programmes. The main task of the Agency is to determine whether higher education institutions achieve the quality standards determined with these provisions as well as other regulations by the Agency.

In less than a century, three public universities (University of Ljubljana, University of Maribor, University of Primorska) were established in Slovenia, where 92% of all students' study. In addition to the three public universities in Slovenia, there are also three private universities.

For successful study, it is essential that students have at their disposal relevant professional and scientific literature, which is an important information source, without which there is no quality study. Academic libraries must justify their mission and function and ensure that their students have the information resources they need to study. The Agency, among other, also reviews whether library services are provided. Judging whether the quality standards are met, the faculty conducts self-evaluation of study programs every year through student surveys. In the survey, students evaluate, among other things, also academic library and library services with assessment about:

- satisfaction with quality of library services,
- suitability of the study, professional and scientific literature and
- suitable premises and material conditions for study.

The results of a review analysis of ten years of student surveys provide good reference to guide the design and develop of future library services.

Keywords: academic libraries, library services, quality, user satisfaction, student assessment

Students in the Light of Studies of Self-perceived Employability and Information Management Skills

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Abstract: The problem of self-perceived employability, the concept connected with personal knowledge and information management in the context of students was described. The self-perceived employability can be defined as the ability to keep the job and as the ability to get the job one desires. And highly educated young people in variety of European Union countries, including Poland, are often unsatisfied with his or her first job.

The empirical studies were conducted among the Polish and German students of various majors. A special scale was used which consisted of 19 statements regarding five components: 1) student's perception of university, 2) field of study, 3) self-belief, 4) state of the external labour market and 5) personal knowledge and information management. The last component, that is the PKIM-personal knowledge and information management, is strongly connected to information literacy, well known in the library and information science literature. The findings of these studies were compiled using statistical methods: descriptive and inferential statistics and compared with the findings of other studies in this scope. Limitations were discussed as well as the implications for the future research of this problematic.

Keywords: employability, self-perceived employability, information literacy, students, personal knowledge and information management

65

Study of the Brazilian Literature on Information Behavior

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Abstract: Studies that analyze the set of international works on the topic of information behavior have been carried out to assess characteristics of the research and theoretical and methodological trends in the area. These assessments provide both a descriptive and a critical analysis of the research allowing scholars to direct their future work in an informed way. However, equivalent analysis of user studies conducted in Brazil are few and of limited coverage. The current work has empirically analyzed the Brazilian literature on information behavior to identify its characteristics, to verify if Brazilian literature follows trends observed in international research and to provide guidance for future works. A literature review and synthesis of international trends in this area was carried. Using the Proknow-C methodology, a bibliographic portfolio was selected containing 233 Brazilian studies on information behavior, published between 2000 to 2017. The works in this portfolio were analyzed regarding the volume of publications over the years; type of authorship, type of research, research approaches, research methods, data collection and data analysis methods, phases of the information behavior process and target user groups covered. The study

shows a growing interest in the area along the 18 years analyzed, with the majority of the works concentrated in the last 6 years covered, a predominance of authors with academic background and of publications in academic journals. Results point in the direction of a majority of descriptive research, of mixed (quantitative and qualitative) research approaches, of major use of one research method, with some works using two or more methods, and of use of mostly questionnaires and interviews for data collection. Results demonstrate a focus on the information needs phase of the information behavior process. Another interesting finding was the great versatility of groups of users in the studies, including a variety of occupations, of age and interest groups, belonging to a variety of types of companies and institutions and using many different types of information and information systems. Results seem to indicate that Brazilian literature follows some of the international trends in studies on information behavior but differs in others. The study presents with suggestions for Brazilian research on information behavior and for further research on the analysis of the literature.

Keywords: Information Science, information behavior, analysis of the literature, trends

A study of the Quality of Work Life for the staff of Greek Academic Libraries

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66

Abstract. The main purpose of this paper was to study the quality of work life for Greek academic libraries staff. An important aspect of the research was also the examination of factors related to the working time and the assessment of their role in Greek academic libraries staff quality of work life. The role of variables related to participants characteristics (personal and occupational) in levels of quality of work life was additionally studied. For the purpose of this study, a wide quantitative research among all Greek academic libraries was conducted. The Work – Related Quality of Life (WRQoL) Scale was used to measure the quality of work life of Greek academic libraries staff, while two questionnaires were constructed for the study needs concerning working time and individuals' characteristics. Survey data was collected from 144 employees of Greek academic libraries. According to the results, the WRQoL level was average for the participants. Findings of the study indicated also that the bulk of the respondents have achieved work life balance and they feel they are involved in decisions that affect them at work, whilst they are not satisfied with the working conditions. Moreover, some differences were identified in the participants' level of WRQoL with respect to the working time factors, but these were not found to be statistically significant. In terms of participants characteristics, it was found that the spouse/partner employment status, the library type, the job position and the department were significantly related to the quality of work life. The WRQoL scale proved to be appropriate and useful in measuring the quality of work life of Greek academic libraries staff. In national level there has not been any similar study

in the field of Library science. The usefulness of the results lies in the fact that the study can provide feedback on human resource management, trade unions, employers and lifelong learning.

Keywords: Quality of work life (QWL), quality of working life (QoWL), academic libraries, Greece, Work – Related Quality of Life (WRQoL), working time

Survey of Users' Level of Satisfaction toward Inclusive Management and Marketing of Library Services

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Abstract: Information and Communication Technologies (ICTs) have brought a great innovation and improvement to bear on library services and methods of meeting users' needs. Assessment of user's satisfaction with the various library services is an important variable toward realization of effective and inclusive management of Library resources and marketing of allied services in the 21st century. With ICTs bringing every access to diverse information resources and access modes, it has become imperative to investigate users' satisfaction as occasioned by creative use of ICTs in information resources management and services. The study therefore, focused on users' satisfaction using adapted CSAT metric to elicit information from 560 users that visited the library within a space of one week. Copies of the questionnaire were administered to the users in such a way that no user was served twice. The data gathered were analyzed using SPSS version 20. The findings revealed that the users' level of satisfaction is on the average and the resources in the library did not meet their information needs, as majority responded that the resources are inadequate and the overall assessment of their interaction with librarians are excellent despite the inadequate resources. Based on the findings therefore, recommendations were made to include creating holistic marketing strategy to improve usability of the library, funding of library in order to acquire more resources to meet users' expectation and need for adequate management of library resources.

Keywords: library services, users' satisfaction, library marketing, library management, library resources

67

Sustainable Development Goals (SDGs) Inspiring Library Projects Planning

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Abstract: All United Nations' Member States adopted the 17 Sustainable Development Goals (SDG) in September 2015 as part of the document "Transforming our world: the 2030 Agenda for Sustainable Development". Based on this documental reference, the paper is intended to connect Library and Information Science students' learning process with SDG development by means of an innovative teaching project. This teaching experience has been based on two pedagogical programs: the Service-Learning methodology and the Library and Information Science project management techniques.

Undertaken in the module "Project management in libraries and information services" (Master in Documentation Management, Libraries and Archives at the Complutense University, Spain), the paper highlights methodological approaches that may be used in other academic teaching scenarios. Conclusions reveal how this innovative teaching project has improved students' learning process to plan library projects for their professional activity.

Keywords: Sustainable Development Goals (SDG), 2030 Agenda for Sustainable Development, library projects planning, project management in Library and Information Science, Service-Learning methodology, The Complutense University of Madrid, Spain

Technological Innovation in Library and Information Science Online Education: San Jose State University Case Study

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Abstract:

Research Objectives

The development of online education in library and information science(LIS) in the United States began in 1996 when the University of Illinois at Urbana-Champaign School of Library and Information Science "LEEP Experimental Project" succeeded, providing library staff with studying opportunities free of time and space restrictions. There are now more than 40 LIS master schools in the United States providing online education. The article explores whether LIS online master's program education in the United States is technological innovation and its influencing factors. The research objectives of the study include: (1) Discussing whether SJSU's online LIS master's program is technological innovation (2) Exploring the online teaching mode of Library and Information Science faculty. (3) Exploring the characteristics and success factors of technological innovation in the online LIS master's program. (4) Exploring faculty's online teaching satisfaction and problems (5) Exploring the value of online master's programs to LIS education. (6) Asking whether technology support, teaching interaction, and school support promote or hinder online education

Research Methods

This study adopted the case study and in-depth interview method and selected the Master of Library and Information Science, Information School, San Jose State University (SJSU) as case study object. The researcher personally visited San Jose State University School of Information to investigate, and interviewed 11 persons, including college administrators, full-time faculty, and master's students. The reason

for choosing the case of the SJSU School of Information School online master's program is that the college has won the Best Online Education Award of the Online Learning Consortium and has developed from one master's program to three master's programs: Master of Library and Information Science; Master of Archives and Record Management; Master of Informatics and with more than 1,800 master students.

Research Results

Respondents agreed that the online master's program of SJSU is a technological innovation with the following characteristics: (1) it involves disruptive innovation and the master's program completely adopts online education instead of traditional classroom teaching. (2) 100% online education using technology; all teaching, learning and management are completely online, and implemented using online learning environment and technology. (3) Students' feel online study is convenient. (4) Faculty professional development is improved. (5) Digital curriculum expands school and student scale.

The interviewed faculty proposed the success factors of the SJSU Online LIS Master program in technological innovation are as follows: the first is the leadership of the administrative team of the Master's program, the second is the acceptance of online education by faculty, and the adoption of technology to promote technological innovation; the third is the online teaching enthusiasm of teachers, helping students solve the problem of online learning to meet current students' online learning needs; the fourth is the online learning support of the university and school; the fifth is that the online master's program in Library and Information Science supports the professional development of faculty; and the sixth is related to the development of students' core competence-oriented online education.

Most of the faculty interviewed were satisfied with the online teaching and technical support of the master's program. Respondents were mostly satisfied with the technical support of online teaching and the master's program, and agreed that the online LIS master program has the following educational value in Library and Information Science: helping graduate students develop their careers and finding jobs; expanding the library and information science employment market, cultivating students' 14 core competencies to help find multiple employment opportunities; improving student learning outcomes; changing LIS education; providing online and open continuing education for librarians; and cultivating students' technological competency.

Keywords: online education, Library and Information Science, e-learning, technological innovation

69

Text and Data Mining for the National Library of Greece in Consideration of Internet Security and GDPR

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Abstract: Text and Data Mining (TDM) as a technological option is usually leveraged upon by large libraries worldwide in the technologically enhanced

processes of web-harvesting and web-archiving with the aim to collect, download, archive, and preserve content and works that are found available on the Internet. TDM is used to index, analyze, evaluate and interpret mass quantities of works including texts, sounds, images or data through an automated "tracking and pulling" process of online material. Access to the web content and works available online are subject to restrictions by legislation, especially to laws pertaining to Copyright, Industrial Property Rights and Data Privacy. As far as Data Privacy is concerned, the application of the General Data Protection Regulation (GDPR) is considered as an issue of vital importance for the smooth operation of TDM service offered by national libraries mostly in the EU Member States, which among other requirements mandates the adoption of privacy-by-design and advanced security techniques. In the described framework, this presentation focuses on the TDM design considerations and applied Internet Security solutions employed by National Library of Greece (NLG). NLG has deployed TDM as of February 2017 in consideration of the provision of art.4(4)(b) of Law 4452/2017, as well as of the provisions of Regulation 2016/679/EU (GDPR). Art.4(4)(b) of law 4452/2017 sets the TDM activity in Greece under the responsibility of NLG, appointed as the organization to undertake, allocate and coordinate the action of archiving the Hellenic web, i.e. as the organization responsible for text and data analysis at national level in Greece. The deployment of TDM by NLG, presented in this presentation, caters for a framework of technical and legal considerations, so that the electronic service enabled based on the TDM operation complies with the data protection requirements set by the new EU legislation. The presentation elaborates upon minimum set of technical Internet Security means considered by NLG for achieving GDPR compliance.

Keywords: web harvesting, web archiving, data analysis, text & data mining, TDM, text mining, content mining, computational text analysis, text and data analysis, web scraping, archiving, copyright law, methods and applications, policies, TDM on databases, reproduction, Optimal Infrastructure, Strong Security Mechanism, GDPR

Theses and Dissertations from ULisboa to the World: A Case Study on the International Visibility of Academic Publications in the Institutional Repositories of the University of Lisbon

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Abstract: The institutional repositories of universities are initiatives that integrate the concept of Open Science, enhancing the free circulation of academic and scientific production. The current University of Lisbon (ULisboa) results from the fusion of the former University of Lisbon and Technical University of Lisbon, in 2013. Currently ULisboa comprises 18 schools (Faculties and Institutes). Since the fusion University of Lisbon still have two independent institutional repositories based on DSpace – the

Repositório.UL and the UTL Repository. Focused on the collection of theses and dissertations, the aim of the following study is to look to the scientific production of ULisboa and analyse the international visibility of it through the statistical report of these two institutional repositories for the last 10 years (2010-2019). The final goal is to demonstrate how the use of institutional repositories contributes to enhance science dissemination, research and researchers' visibility and promotes the access to knowledge, improving the quality of the information available on the web.

For this purpose, the total number of thesis and dissertations of the 18 schools of ULisboa, archived in both repositories, were collected, for the period 2010-2019 (10 years of implementation of the institutional repositories). Usage statistics (views and downloads) were obtained as well as the home countries of these accesses. All the collected data were analysed.

Results show us that the number of thesis and dissertation archived in the repositories has been growing, as well as their use (views and downloads) is very significant in both repositories. Considering that statistical data of the repositories are very consistent and that simultaneously it ensures the security regarding digital preservation, both the institution and the community (teachers, researchers and students) benefit from the archive and dissemination of their academic publications through the repositories.

The self-archive policies of the University of Lisbon express as the major goals, to gather and organize systematically the set of intellectual, academic and scientific production; to disseminate, provide access and more visibility to research developed; to improve monitoring, evaluation and management of research and teaching activities and to promote the enhancement and preservation of the intellectual and cultural heritage of this University.

In order to comply with these policies and to reinforce ULisboa's position as a producer of scientific knowledge and avoid data dispersion, the merge of the two repositories becomes essential.

Keywords: open science, open access, institutional repositories, university, Portugal

Topic Modeling Techniques for Library Chat Reference Data: Challenges, Solutions, and Future Directions

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Abstract: In order to obtain rich, actionable insights in a timely manner from vast amounts of chat reference data, we chose topic modeling techniques that would enable us to analyze unstructured text data requiring no human intervention. With a one-year planning grant starting July 1, 2019, we analyzed one academic library's chat reference data collected from April 10, 2015 to May 31, 2019 using different types of topic modeling techniques. The overall goal of this project, aside from three sub-goals addressed below, is to enable other researchers with their own chat reference data to duplicate fully or selectively our iterative processes toward our final goal of extracting the most accurate and easily interpretable topics.

The first sub-goal of this project is to identify the most appropriate topic modeling technique to enable us to extract meaningful, interpretable, coherent, and useful

topics. In achieving this goal, we first vectorized the chat text data before applying tf-idf, then we analyzed the chat data using unsupervised techniques of Latent Semantic Analysis (LSA), Probabilistic Latent Semantic Analysis (pLSA), Latent Dirichlet Allocation (LDA), and Short Text Topic Modeling (STTM). As follow-up, we explored semi-supervised approaches of Correlation Explanation (CorEx) and GuidedLDA to increase the accuracy of chat topics by seeding topic discovery using word co-occurrences and tri-occurrences curated from the combined topics found using unsupervised techniques.

The second sub-goal is to investigate alternate solutions to challenges that we encountered when applying topic modeling techniques in terms of preprocessing, evaluating and selecting topic models, and diagnosing the quality of topics. At the stage of preprocessing, we did context-specific preprocessing (e.g., chat-specific or institution-specific stopwords, preparing two versions of the chat data: question-only and whole-chat dataset) as well as simple preprocessing using existing toolkits (e.g., nltk). We debated the extent of preprocessing, and explored parts-of-speech preprocessing on the whole-chat dataset. At the stage of running models and choosing a most stable model, we experimentally explored the topic models' parameter space (e.g., grid search LDA parameters by varying `n_topics` and `learning_decay`) and diagnosing model performance using internal metrics such as held-out perplexity and log-likelihood metrics. At the stage of evaluating the quality of output topics, we used TC-PMI, TC-LCP, TC-NZ, and STTM Mean Coherence PMI as topic coherence metrics.

The third sub-goal is to explore future directions for improving models and increasing the accuracy of topic modeling with respect to chat text analysis. Despite having four years of chat data, it is a relatively small amount of text for topic modeling and from one institution. To increase the amount of data and diversify types of data, we would need to collect more data from diverse institutions. Also, semi-supervised approaches look promising, but they require human subjective judgment for selecting anchor words. In overcoming this, we would need to identify a library-specific corpus and automate the processes of selecting anchor words. Last, we would need to identify and use new methods in terms of diagnosing or evaluating models or output to help us obtain novel types of insights.

Keywords: topic modeling, library chat reference, LSA, pLSA, LDA, STTM, CorEx, GuidedLDA, semi-supervised learning

Towards a New Generation of Digital Repository of Scientific Institutes

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Abstract: Digital Repository of Scientific Institutes (DRSI) has been established in 2010 as a collective initiative of 16 scientific institutes from Poland. The main objective of this initiative is to provide to the research community a country-level, multidisciplinary digital repository composed of archival materials, scientific publications, research documentation and cultural heritage content. DRSI is maintained by the Polish scientific institutes, forming the DRSI Consortium. In 2018

a country-level, EU co-funded project named OZwRCIN, has been initiated in order to improve DRSI. The project sets out several objectives that can be reduced to a general statement about sharing, archiving and disseminating public sector information. More than 140 thousands of digital objects will be provided in the scope of the project, using new technologies and innovative approaches. The project specifically aims at providing research datasets. To manage digitisation activities and make the digital content available online the DRSI uses infrastructure and tools developed by Poznan Supercomputing and Networking Center (PSNC). PSNC is an ICT-focused R&D institution, infrastructure provider and operator of the Polish Optical Internet PIONIER. PSNC is a technical partner in the OZwRCIN project. The presentation will discuss in detail the key concept of the DRSI, its infrastructure, the software stack as well as organisation of the consortium itself.

DRSI is built using well-established DInGO toolset, developed by PSNC since 2002 with more than 140 deployments in Poland and abroad. The whole DRSI ecosystem is composed of these systems:

- Digitisation workflow management
- Long-term archiving
- Content discovery & delivery

Digitisation workflow management system (called dLab) organises and monitors digitisation workflow executed within participating institutions. It guides users through specific digitisation actions, which can be executed manually or in an automated manner (e.g. OCR, content conversion/enrichment, data ingestion). dLab system communicates also with two other components. On one hand, after the digitisation workflow is ended, it ingests SIP (aligned with the OAIS model) to the long term archiving system called dArceo, which prepares the AIP (using METS, PREMIS, MIX, TextMD and AES57) and manages it in a long-term manner. On the other hand, once the presentation version of the digital object is ready, the dLab system ingests it into the content discovery & delivery platform called dLibra. The platform is then responsible for appropriate delivery using RWD, WCAG, “5 star Open Data” and UX principles. The digital objects themselves are represented either by typical formats like PDF and IIIF-based image gallery, or by several formats in case of research object (e.g. image gallery supplemented by textual description or map with geolocated digital items).

In addition, the platform provides access to resources on two levels. First, there is one portal that provides access to the whole dataset. Second, each participating institution has its own repository with their digital items only. As a result, each institute can promote and manage access to their content separately from the overall portal. There is no copying of data in this setup - the digital items themselves are preserved in one place only and the editor of the system decides whether it should be visible on the main portal, or on the institutional site or on both.

Keywords: large-scale digital repository, digitisation workflow, long-term preservation

Training in the Preservation of Written Cultural Heritage a Priority in the Activities of the University of Library and Information Technology

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Abstract: In parallel with the expansion of the boundaries of political and economic integration, with changes in traditional geopolitical thinking, the notion of written heritage with its scope and content has evolved. The criteria for authenticity and the methods of preservation, storage, use and management are changing. There is a growing danger of losing valuable archival and library collections that determine the identity, knowledge and history of humankind.

The massive invasion of integration and communication technologies into the organization and management of modern societies reverses and elevates the role of libraries, archives and museums in publicly accessible institutional structures working in collaboration with one another in order to ensure unhindered access to documentary written heritage, create a common information space and enhance the culture of civil society.

The significance of the problem is related to ensuring that future generations can read the texts and adopt the knowledge preserved today, on the basis of which they can create new knowledge that will enrich the cultural heritage of humanity. Thus, the endless cycle of perception, creation, recording, preservation and transmission of knowledge will continue to enrich society and serve the progress of civilization.

Keywords: written cultural heritage, preservation, conservation, restoration, educational process

74

Triage: Special Collections Instructional Services in the Age of COVID-19

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Abstract: In mid-March, the international COVID-19 crisis resulted in university administrators worldwide making the decision to close the doors of their institutions and move instruction to a virtual environment. As a result, difficult decisions about continuing library services to students had to be made – and quickly. At Mississippi State University Libraries, the Special Collections Department identified instruction as its top priority, specifically instruction targeted to upper-level research classes dependent on one-of-a-kind primary source materials (e.g., letters and diaries) for completing course projects and objectives. This presentation will describe the activities performed by the Department to communicate with course instructors and

students to identify their needs to successfully complete the semester. It will also outline the coordinated activities between the Department and the Library's Digital Preservation and Access Unit to make these resources available in a digital format to ensure that instructors and students could access necessary materials. Finally, the presentation will also detail how the Library's archivists are responding to the potential for continued digital instruction by way of an emergency action plan for the Fall 2020 semester. Insights as well as lessons learned from this unique experience will be shared.

Keywords: special collections, COVID-19, instruction

Understanding Librarians' Continuing Professional Development

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Abstract: The paper provides an insight into librarians' experiences of Continuing Professional Development (CPD) and the challenges of participating in CPD. A qualitative approach within the interpretive paradigm was used. Data were collected using semi-structured interviews and focus group interviews with librarians. A purposive sample was selected of librarians employed in public university libraries in Uganda. Thematic data analysis was used to generate the themes. The data saturation point was reached when the eighteenth participant was interviewed. The findings indicated that librarians perceived CPD to entail skills development, continuous learning, keeping up-to-date, and learning for interest. The study identified challenges in regard to CPD needs identification, planning, implementation and support. The study concluded that CPD is context dependent, thus librarians from different working contexts have different perceptions of CPD.

Keywords: continuing professional development, perceptions, experiences, librarians, public university libraries, Uganda

75

Use of ACRL Information Literacy Frameworks in Information Literacy Instruction

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Abstract:

Purpose

ACRL Information Literacy (IL) Framework has replaced the ACRL IL Standards since 2016. The purpose of this study is to discover how widespread college and university librarians in the U.S and in the state of New Jersey are following the IL Framework in their IL instruction. Which Frameworks do they use in instruction? How do they assess students' learning outcomes under the Frameworks? What are the

obstacles in following the Framework? What other overarching guidelines or methods college librarians use for IL instruction, if not using IL Frameworks.

Methodologies

The investigators will develop a survey and send it to college and university library discussion lists in the U.S. and in New Jersey, including IL instruction listserv (ILL), ACRL Framework list, Special Library Association list, New Jersey College and University libraries' list, and Virtual Academic Library Environment of New Jersey (VALE) list. The data analysis will reveal the application of IL Frameworks in colleges and universities in New Jersey and elsewhere. The qualitative analysis may also shed light on how librarians teach with the Frameworks and how students learn under this type of instruction. Assessment techniques used for teaching under the Frameworks will reveal student learning outcomes.

Findings

Findings may inspire college librarians in developing their instruction programs with the Frameworks and possibly other theoretical guidelines in mind.

Originality/Value

Many librarians are struggling to use the new ACRL Information Literacy Frameworks, especially in one-shot instruction sessions. This study will determine how extensively these new frameworks are being implemented. The information from the survey will provide ideas for implementation and assessing student learning.

Brief Description:

A survey sent to library listservs will reveal how widespread college and university librarians in the U.S are following the ACRL IL Framework in their IL instruction, which Frameworks do librarians use and how do they assess students' learning outcomes under the Frameworks?

Keywords: information literacy instruction, ACRL Information Literacy Frameworks, library instruction, survey, college and university libraries, assessment

76

User Studies and Comparative Librarianship: How, Why and What For

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Abstract: User studies allow researchers to apply diverse methodologies and techniques. These methodologies and techniques make possible the design of research within libraries, thus supporting knowledge development, information needs, and informative behavior; they allow for the definition of libraries typology in order to solve problems or make decisions in professional practice. The literature has shown evidence through case studies that the comparative and international librarianship methods allow researchers to efficiently manage and contribute towards studies on users from various environments. This presentation analyzes the relevance of user studies from the perspective of comparative studies. It aims to explain how the method can be used to maximise its usefulness, as well as why it is necessary to study and execute user studies under the light of comparative librarianship. The analysis of the method and its application in user studies are studied, and success stories are presented where these two variables have been applied for research and the solution of user problems in libraries.

Keywords: comparative librarianship, user studies, library services, international librarianship

Using Phenomenological Interviewing to Learn from Underserved User Communities

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Abstract:

Problem Statement

The methods we use to learn about our user communities are critical to shaping our understanding of their library experiences, expectations, and needs. Professional librarians in the United States are overwhelmingly white and middle class, which means that we must be particularly thoughtful in how we learn about, learn from, and engage with user communities that have traditionally been underserved. Specifically, we must ensure that we are mindful of learning about underserved user communities from their perspective(s) rather than applying the perspectives of the majority.

In academic librarianship in the United States, we have learned about traditionally underserved student populations, such as students of color and first-generation students, through quantitative and basic qualitative interviews. While this research has provided an important foundation for understanding the library experiences and needs of these students, it has not provided information about the arc of their library experiences and how their past experiences may shape their present and future library use.

Purpose

In this abstract presentation, we discuss the use of Seidman's (2013) phenomenological interviewing and how it was modified and applied to a research study exploring the experiences of Black and African-American students, a student population that has historically been marginalized in American higher education, at two large research universities in the midwestern United States.

Methods

Phenomenological interviewing requires the researcher to consider the participants' histories and lived experiences as they relate to the phenomenon being explored. Seidman outlines a three interview series, which includes understanding the participants' historical experiences with the phenomenon being explored, their present experiences with the phenomenon, and, finally, a reflection on the meaning of those experiences. In each of the two studies introduced in this presentation, Seidman's three-interview series was modified to design a 60-75-minute, semi-structured interview protocol. For this study, we used convenience and snowball sampling to recruit 15 participants.

Findings

The use of phenomenological interviewing allowed us to collect a rich data set from which emerged findings that begin to address existing LIS research gaps. Despite using libraries frequently in throughout their lives for both leisure reading and in support of their academic pursuits, these students had limited interactions with

librarians. This was particularly in college, and most participants did not know about subject librarians and the types of support or expertise they could provide. In addition, race did seem to play an important role in the participants' public library experiences, particularly for students who used libraries in predominantly white communities. Participants' experiences demonstrate evidence of implicit bias in these interactions. The findings have significant implications for students' willingness or ability to ask for support from academic librarians, as well as the profession's ability to recruit a diverse workforce.

Using the Gap Analysis Method to Determine Health Information Literacy Needs of the Drug Court Population

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Abstract:

Introduction

The first drug treatment court (DTC) was created in 1989 to address physical and mental needs and decrease recidivism of people who have committed nonviolent criminal acts related to substance abuse disorders (Lurigio, 2008) through participation in recovery and education rather than incarceration. Successful outcomes for DTC participants include increased educational attainment, increased control over chronic health issues, ability to maintain paid employment, and reduced recidivism after their DTC participation ends.

However, increased health information literacy, "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions" (U.S. Department of Health and Human Services, 2010, p. 1), is not an expressed expected outcome, even though increased health literacy would positively contribute to other outcomes.

Librarians have been involved with health literacy "since its inception, contributing through research, teaching, and programmatic efforts" (Barr-Walker, 2016, p. 191). Librarians' efforts are often geared toward underserved or vulnerable populations. Moreover, emerging models of social workers in public libraries point towards the viability of library partnerships for DTCs.

Method

Gap analysis is method commonly used to measure the gap "between where things are now and where they could or should be" (Dickerson, 2018, p. 4). Gap analysis has been used in patient care discharge processes (Cruz, Fine, and Nork, 2017); in education to reveal disparities between competencies and curricula (Kumasi & Hill, 2011; Ritko & Odlum, 2013); and to assess information literacy for graduate students (Exner, 2014).

In this study, gap analysis begins by looking at best practices for health literacy as embodied in the DTC system, and how those practices manifest in regards to health literacy. The Ten Key Components of Drug Courts represent a set of Best Practices for DTCs. In addition to a review of literature on DTC practices, we supplement with

interviews with DTC employees (counselors, social workers, probation officers). Our interviews focus on their perceptions of health literacy coverage in DTC programs.

Results

Three Key Components of the DTC system are aligned with health literacy of clients:

- Key component 1: ... Upon entering the program, participants are assessed for needs regarding detoxification, education, and other needs.
- Key component 2: ... Comprehensive care includes helping patients understand and take care of medical problems, sexually transmitted diseases, basic educational deficits, unemployment, domestic violence, and other problems.
- Key component 8: Performance benchmarks include increased educational level, improved medical condition, and increased literacy.

However, our interviews with DTC employees suggest that health literacy is not emphasized nor formally supported, and there are limited relationships with public or other types of libraries.

Conclusion

At this time, it seems there is a gap in meeting DTC participants' health information needs. Libraries might hold a key to making this connection through partnerships through emerging social work programs in libraries. The health information literacy model for incarcerated adults (Kouame & Young, 2014) could provide a model to begin addressing the needs of this particular problematic, underserved population.

Keywords: gap analysis, health literacy

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UX Perspectives Regarding the Development of Public Library Personas

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Abstract: User experience methods have been deployed in libraries to improve both physical and digital services. This paper describes the work the authors completed in developing public library personas while working on a renovation plan for the Noel

Wien Public Library. Many public library personas are similar across different types of libraries but there are always unique aspects in every library setting. We will discuss public library personas and how generalizable are for different library settings.

Keywords: user experience, personas, library users, public library

Wikipedia and Library & Information Science: A Bibliographic Review, 2001-2020

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Abstract: Wikipedia is the world's largest open repository of information, available in approximately 300 languages, and routinely ranked in the top 10 most-visited websites. Since the crowdsourced encyclopedia's inception in 2001, Web of Science has indexed 420 articles with the topic "Wikipedia" within the research area of "Information Science & Library Science" (LIS). This presentation will provide an overview of the 420 published articles (including chronology, languages, authors, countries, methodology, open access, gaps in research, possible future directions). The results show the US is the top producer of articles (145), followed by Spain (39), and China (35). The majority of articles are in English (376), with 12 in Italian, 10 in Spanish, and 10 in German. The top source is the Journal of the Association for Information Science and Technology, JASIST (38).

Keywords: Wikipedia, bibliography

80

Bibliometric Analysis of the Journal Act (1894-1915.)

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Abstract: Bibliometric the journal Act: Journal of Science, Literature and Social Life, was published from 1894. to 1914. in Belgrade and in 1915. in Niš. It did not go out in 1900. and 1901. Over the 20 years of publication, 74 books in 214 volumes have been published.

The journal was edited by: Ilija I. Vukicevic, Stojan M. Protic, Milovan Đ. Milovanovic, Dragoljub M. Pavlovic, Ljuba Davidovic, Rista J. Odavic and Lazar Markovic. The collaborators of the work were: Simo Matavulj, Branislav Nusic, Sima Tomic, Jasa M. Prodanovic, M. K. Dragutinovic, Svet. P Rankovic, Đorđe Stratimirovic, Bogdan Popovic, Janko Veselinovic, Aleksa Santic, Ivo Cipiko, Dragoljub Pavlovic, Vladislav Petkovic - Dis, Milenko Vukicevic, Vladimir Corovic, Aleksandar Belic, Nedeljko Divac, Josip Kosor, Sima Pandurovic, Radoje Domanovic, Ante Tresic-Pavicic, Branislav Petronijevic and many others.

The number of published works in twenty volumes of Act:

274 works were published in volume 1-4 (1894); 297 work in volume 5-8 (1895); 246 work in volume 9-12 (1896); 191 work in volume 13-16 (1897); 218 work in volume

17-20 (1898); 106 work in volume 21-22 (1899); 113 work in volume 23-25 (1902); 135 work in volume 26-29 (1903), 29 in volume 8 (1968); 161 works in volume 30-33 (1904), 144 in volume 34-37 (1905); 141 work in volume 38-41 (1906), 123 in volume 42-45 (1907), 107 in volume 46-49 (1908); 111 works in volume 50-53 (1909), 128 in volume 54-57 (1910); 123 works in volume 58-61 (1911); 177 works in volume 62-65 (1912), 195 in volume 66-69 (1913); 88 works in volume 70-71 (1914), 110 works in volume 72-74 (1915).

The bibliography was done de visu, with chronologically arranged material, with appropriate registers according to the bibliographic rules of ISBD (CR). The chronological principle provides an overview of the content of each issue, of each year, of the editorial policy, as well as of any changes on some of the current topics that were current. Annotations with each bibliographic item contribute to its thematic and genre structure. They are a supplement to the bibliographic unit, both formal and essential. Names, subject and title register are an integral part of the bibliography. The work is classified in the most significant periodicals from the late 19th and early 20th centuries. It presents sections from literature, science, socially political life and cultural life of Serbia through various contributions in each issue. The texts are arranged to hold the reader's attention, and literary and scientific texts are replaced with political debates and notes on all cultural events.

Keywords: bibliometric analysis, Act, journal

Navigating the Visibility of New Scholarship: An Analysis of Academic Library Websites' Documentation on Altmetrics

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Abstract. The advanced development of the Internet, prevalence of digital publication, and expansion of the open access movement have all contributed to continual evolution in scholarly communication approaches. An increasing number of scholarly outputs published in open access digital publishing platforms. Meanwhile, more scholars are engaging in academic exchange with their research fellows through social media. Against such a background, Altmetrics have become increasingly popular as a research outputs measurement in the online environment and received increasing attention from scholarly communities, universities and research institutions. Altmetrics are new metrics used to measure and analyze scholarly activities in social media in the Web 2.0 environment. They emphasize the exploration of online scholarly communication. Altmetrics are able to reflect research impact instantly, in contrast to the time-lag between the publication of an scholarly work and the feedback of its scholarly influence.

The data sources of Altmetrics encompass various types of social media, and the evaluation indicators involved are of more diverse types than those applied in conventional citation-based evaluation methods. In response to the considerable change brought by Altmetrics, the Association of College & Research Libraries (ACRL) in US have twice listed Altmetrics as one of the top trends in academic libraries in 2014 and 2016. The environmental scan published in March 2019 by

ACRL Research Planning and Review Committee also recognized Altmetrics as a hot topic of research on scholarly influence as well as a highly popular research subject among academic librarians and scholars. This phenomenon is attributable to how Altmetrics create new types of research outputs measurement in addition to those in traditional bibliometrics.

To investigate the current application of Altmetrics in US academic libraries, this study selected 30 universities from the list of “R1 Doctoral Universities: Very High Research Activity” under the basic classification of the Carnegie Classification of Institutions of Higher Education. Using the library websites of the 30 universities as the research subjects through browsing and searching for a series of keywords related to Altmetrics, the present study analyzed relevant information of Altmetrics services to explore the types and content of Altmetrics information services provided by US academic libraries. This analysis was performed through an analysis list developed in this study. Specifically, a list of specific terms and concepts was compiled as a reference for searching and analysis through both the Google search engine and searching function of the library websites. Moreover, inquiries were made in the LibGuides Community Platform to supplement Altmetrics subject guide data established by each library using LibGuides. The research questions of this study are as follows: (1) What are the types of Altmetrics information services provided by these academic libraries? (2) What are the items and content usually present in Altmetrics subject guide established using LibGuides? (3) What is the current status of Altmetrics applications in institutional repositories or research hubs? (4) What are the Altmetrics tools currently employed by these academic libraries? (5) Are Altmetrics a content supplemented to the research support services provided by these academic libraries? The answers of these questions may reveal the types of information service, tools and the applications of the Altmetrics to enhance the service in the libraries of these top US research universities. The results of this study may serve as a reference for academic libraries in advocating Altmetrics on campus.

Keywords: Altmetrics; Scholarly Communication; Academic Library; Research Impact; Research Outputs Measurement

Name	Page
Adkins, Denice	78
Alentejo, Eduardo da Silva	57
Alese, Gbemisola	47
Al-Naki, Hawa	35
Alpigiano, Carlotta	33
Alvanoudi, Noula	66
Arquero-Avilés, Rosario	15, 63, 67
Ascencio-Baca, Gerardo	27
Bafouni, Evaggelia	28
Balagué, Núria	34
Baptista Melo, Luiza	16,70
Bassett, Caroline	2
Bastos, Glória	50
Becker, Louis T.	16
Betanski, Blazej	72
Bocanegra Esqueda, Tomás	76
Bossaller, Jenny S.	18, 78
Bouzková, Helena	48
Bridges, Laurie M.	80
Brindesi, Hara	54
Burns, Sean	18
Buwule , Robert Stalone	22
Cajthamlova, Anna	44
Casals Parladé, Judit	61
Chisaba Pereira, Cristian Alejandro	26
Clenney, Jean	30
Cobo-Serrano, Silvia	15, 63,67
Coghlan, Monica	79
Costa Lopes, Sílvia	70
Crumpton, Michael	14
Cruz, Célia	16
Dannerbeck Janku, Anne M.	78
Dawson, Patricia	75
Dedetzi, Panagiota	54
Despotopoulou Nektaria	54
Dosch, Brianne	17
Esteva, Ellen M. Maria	58
Fedorowicz-Kruszewska, Malgorzata	39
Ferreira, Grazielle Magnólia Nogueira	65
Fienup, Mark	71
Flannery, Jeremiah	37
Fleming-May, Rachel A.	17
Folk, Amanda L	77
Foltyn, Tomas	44
Gaitanou, Panorea	51
Gbotoso, Ajibola ‘Sunmade	47
Geary, Jade	30, 48
Gerolimos, Michalis	69
Gould, Elyssa M.	16
Grubišić, Marina	21
Haasio, Ari	31
Hadzhieva, Boryana	31, 74
Haggerty, Kenneth	36
Hamada, Masatoshi	62
Holvoet, Kate	60
Hřebecká, Dana	39

Hsieh, Ma Lei	75
Ishee; Jenifer	74
Kaigorodova, Tatyana V	13
Kalligeros, S.	54
Katsirikou, Anthi	54
Khodorenko, Anna	38
Koh, HyunSeung	71
Kouri, Stavroula	54
Kourmoulakis, Kostas	28
Koustas, Nikolaos	51
Kraniotou, Katia	54
Kriukova, Irina A.	13
Kříž, Filip	48
Kundačina, Bojan	59, 59
Kyrillidou, Martha	79
Lepik, Krista	442
Lesenková, Eva	48
Liu, Yu	12
Lookingbill , Valerie	30
Machin-Mastromatteo, Juan D.	27
Madge, Octavia-Luciana	23
Maixnerová, Lenka	48
Mally, Richard F.	39
Malo de Molina, Teresa	28
Manabat, April R.	54
Manalis, Dimitrios	28
Mandel, Lauren H.	24
Manasseh',Tyungu Sambe	11
Mäntykangas, Arja Ellen	23
Marco-Cuenca, Gonzalo	15, 67

Mărginean, Elena	52
Marquet, Andreas	56
Martins, Fernanda	25
Mastley, Carrie	74
Matias, Maria Isabel	50
Matlabi, Dariush	62
McCutcheon, Emily	17
McGillan; Jennifer	74
Mezick, Jennifer	16
Miholič, Petruša	64
Mikovska, Tsvetomira	9
Miller, Lara	50
Million, A.J.	36
Naka, Hajime	12
Namaganda, Agnes	75
Natividad, Karen Cecille V.	54
Neoralová, Jitka	39
Nikolaou, Chrysa	41
Novo, Ana	16
Nowicki, Rebecca	60
Obinyan, Oluwatoyin Oyeyemi,	67
Odunsi, Charity Olubusola	46
Olaajo, Pius Olatunji	46,47
Oliveira Henriques, Susana	70
Ortiz-Myers, Maria	10
Overbey, Tracey	77
Pacetti-Donelson, Vandy	53
Papadopoulos, Marinos,	69
Parkoła, Tomasz	72

Pavel , Tal	40	Tarango, Javier	27
Pavlova, Ivanka	9	Teixidor, Josep Soler	63
Pérez-Salmerón, Glòria	1	Terra, Ana Lúcia	25
Petrovic, Vera	80	Terzi , Paschalia	8
Pinto, Manuela	25	Thaddeus, Ioryem Nguachia	11
Popescu, Elena	43	Thanopoulou, Helen A.	54
Powers , Meredith	58	Todorinova, Lily	10, 26
Quintero Orta, Eduardo E.	5	Tsay, Ming-yueh	81
Rathje, Ellen M.	58	Tseng, Ling-li	81
Repanovici, Angela	5	Tsubaki, Michiko	62
Rivera-Aguilera, Alma Beatriz	63	Tsvetanska, Iskra	74
Roccanova, Camille	79	Vaaro, Ilmar	42
Roshanzamir, Saba	62	Valadares Cendón, Beatriz	65
Roy, Projes	64	Vasileva, R.	34
Sá, Isabel	16	Vavousis, Konstantinos	69
Saarti, Jarmo	34	Vávrová, Petra	39
Sanches, Tatiana	16,70	Veimann, Kristel	2
Sciarini, Natalia	32	Vella, Tinamarie	58
Shi, Jiqiang	35	Verger Arce, Neus	61
Simpson, Todd	58	Villagran Michele A. L.	43
Siso-Calvo, Brenda	63	Villegas-Muro, Alejandro	27
Smailagic, Jelena	80	Volovici, Rodica	52
Smith, Abigail	79	Vouvaki-Manousaki, Christina	51
Špiranec, Sonja	21	Walter, Omona	75
Stancheva, Silvia	9, 31	Wang, Mei-Ling	68
Stecklein, Heather J.	53	Welsh, Teresa S.	7, 22
Steele, Jennifer Elaine	24	Wilkinson, Zara T.	26
Suzuki, Takafumi	62c	Xenakis , Christos	69
Świgoń, Marzena	65	Yang, Sharon	75
Szulc, Jolanta	45	Yang, Zhiping	12

Περιεχόμενα		Σελίδα
Cultural Heritage Organisations as Assets for Sustainable Development, Glòria Pérez-Salmerón		1
Digital Humanities: What Does it Need to Be? Caroline Bassett		2
To Improve is to Change: Service Based Organisation and Change Management in the National Library of Estonia, Kristel Veimann		2
3D Printing Services in the Libraries, Angela Repanovici		5
“Precision Library Services”: The World Bank Group Library Experience, Eduardo E. Quintero Orta		5
Bibliometric and Scientometric Research, Teresa S. Welsh		7
4 Steps to Curriculum Mapping, Paschalia Terzi		8
The Academic Educational Environment as Influence Factor in the Creative Industry, Ivanka Pavlova, Silvia Stancheva, Tsvetomira Mikovska		9
The Academic Library and LGBTQ Students: A Survey of Librarians and Library Administrators at LGBTQ-Friendly Colleges and Universities in the United States, Lily Todorinova, Maria Ortiz-Myers		10
Access to Academic, Professional and Leisure Materials in University Libraries in Benue State, Ioryem Thaddeus		11
Accurate Identification and Measurement of Sci-tech Poverty Alleviation Objects Based on Library in China Yu Liu, Zhiping Yang		12
An Analysis of Hikikomoris “Hidden” Information Needs on an Online Discussion Forum: Applying Dervin’s Sense-making Metaphor to their Text-based Self-narratives Hajime Naka		12
Analysis of Information Needs for World Health Organization Publications among Users of WHO Documentation Centre Website, Tatyana V. Kaigorodova, Irina A. Kriukova		13
Analyzing Open Access Impact to Learning Spaces, Michael A. Crumpton		14
Assessing Special Libraries' Strategic Issues: An Analysis from LIS Profession, Silvia Cobo-Serrano, Rosario Arquero-Avilés, Gonzalo Marco-Cuenca		15
Assessing the Value of Library Resources for Renewal Negotiations, Louis T. Becker, Elyssa M. Gould, Jennifer Mezick		16
Behavioural Trends in the Use of Printed Books or E-books: A Case Study in Portuguese University Libraries, Luiza Baptista Melo, Tatiana Sanches, Ana Novo, Isabel Sá, Célia Cruz		16
Best Practices for a Bibliographic Database: Creation, Maintenance, and Sustainability, Rachel A. Fleming-May, Brianne Dosch, Emily		17

McCutcheon	
Bibliographic Subject Analysis of Fake News, Jenny Bossaller, Sean Burns	18
A Bibliometric Approach to Measuring Societal Impact of Research Based on the Principle of Productive Interaction, Marina Grubišić, Sonja Špiranec	21
A Bibliometric Study of Scholarly LIS Literature Related to Collection Analysis/Evaluation, Teresa S. Welsh	22
Building Dynamic Business Information Financing for Enhanced Agricultural SME Innovations in Uganda, Robert Stalone Buwule	22
Categorizing the Meaning of Libraries from the Users' Point of View, Octavia-Luciana Madge and Arja Ellen Mäntykangas	23
Censorship in American Public Libraries: An Analysis Using Gatekeeping Theory, Jennifer Elaine Steele	24
Comparing Different Methodologies Used in Wayfinding Research in Library Facilities, Lauren H. Mandel	24
Copyright Literacy of LIS Students in Portugal: Some Results from a Case Study, Ana Lúcia Terra, Fernanda Martins, Manuela Pinto	25
Data-driven Model (DDM) for Collection Development and Management: From Library Data to Value Generation Institutional, Cristian Alejandro Chisaba Pereira	26
Designing a Faculty Survey to Assess the Open and Affordable Textbooks Program at Rutgers University, Lily Todorinova and Zara T. Wilkinson	26
Developing an Analytical Framework to Study the Inclusion of Information and Research Skills in Higher Education Curricula, Alejandro Villegas-Muro, Juan D. Machin-Mastromatteo, Gerardo Ascencio-Baca, Javier Tarango	27
Digital Humanities in the Library of the Carlos III University of Madrid, Teresa Malo de Molina	28
Dimitris Rondiris(1899 - 1981) Physical Archive to digital collection, Kostas Kourmoulakis, Evaggelia Bafouni, Dimitrios Manalis	28
Discussion Groups and Chat Rooms – An Ethical and Methodological Analysis, Ari Haasio	29
EDI within Libraries: Do We Know What's Effective, Successful or Failing? Jean Clenney, Jade Geary and Valerie Lookingbill	30
Elearning for Professionals – “Vogue” Trend or a Unavoidable Alternative?! R. Vasileva, I. Yankova, S. Stancheva, B. Hadzhieva	31
Elementary, My Dear Watson: How Special Collections Use Automated Collection Management Software to Analyze Circulation Statistics and Resolve “Missing Book” Cases, Natalia Sciarini	32
Ensuring More Services with Less Resources: Business Process	33

Redesign as an Efficiency Multiplier, Alpigiano Carlotta	
Evaluating the Benchmarking as a Methodology for the Academic Library Quality Enhancement, Núria Balagué and Jarmo Saarti	34
An Evaluation System for the Degree of Research Interest of Plant Species, Jiqiang Shi	35
The Everyday Life Information Seeking Behavior of Muslim Newcomers in Montreal, Canada, Hawa Al-Naki	35
An Exploratory Study of Organizational Alignment in U.S. Academic Libraries, A.J. Million and Kenneth Haggerty	36
Extracting with Style: Using Natural Language Processing to Generate Summaries of Rare Materials, Jeremiah Flannery	37
The Factors of Free MT and Open Access in E-publishing, Anna Khodorenko	38
First Aid for Libraries in Czech Republic in COVID-19 Pandemic Time, Petra Vávrová, Jitka Neoralová, Dana Hřebecká, Richard F. Mally	39
Green Librarianship – Conceptualisation, Areas, Methods of Evaluation of Activity Results, Malgorzata Fedorowicz-Kruszewska	39
How Deep the Web is? Tal Pavel	40
How Lockdown Redefines Libraries; the Future Beyond the Pandemic, Chrysa Nikolaou	41
How to Survive the Race against Time? Estonian Libraries During the COVID19 Outbreak, Krista Lepik, Ilmar Vaaro	42
Human Dimension in Adopting Quality Management in Romanian Research Libraries: Librarians' Skills for Supporting Researchers' Visibility, Elena Popescu	43
Impact of Cultural Intelligence within Special Libraries: Focus Group Findings and Overall Results, Michele A. L. Villagran	43
IN-PROVE: Integrated Environment for the Effective Management of the Individual Procedures of the Modern Book Collections' Preservation, Anna Cajthamlova, Mgr. Tomas Foltyn	44
Information Culture in the Age of Coronavirus. Study of Students' Opinions as Potential Library Users, Jolanta Szulc	45
Information ethics observance, information literacy skills and use of library information materials by undergraduates in two universities in Osun and Oyo states, Nigeria, Pius Olatunji Oloajo and Charity, Olubusola ODUNSI	46
Information needs, information and communication technology skills and use of cloud computing by undergraduates in selected private universities in south-west Nigeria, P. O. Oloajo Alese, Gbemisola, Gbotoso, Ajibola 'Sunmade	47
Instructional Design and Librarianship: Navigating the Necessary Skills for our Changing Library Landscape, Jade Geary	48

The Involvement of the National Medical Library in Increasing Health Literacy in Collaboration with the Network of Public Libraries in the Czech Republic, Helena Bouzková, Eva Lesenková, Lenka Maixnerová, Filip Kříž	48
Kick Start your Assessment Project with User Experience Methods, Lara Miller	50
Leadership and Assessment of the School Library: A Qualitative and Quantitative Analysis in Two Portuguese Schools, Glória Bastos, Maria Isabel Matias	50
Library Anxiety among Users of a Multinational Academic Environment: The Case Study of a Major European University Library, Christina Vouvaki-Manousaki, Nikolaos Koustas, Panorea Gaitanou	51
The Library as Information Tool, Elena Mărginean, Rodica Volovici	52
A Literature Review for the Implementation of Mobile Technologies in Cultural Heritage Organizations, Vandy Pacetti-Donelson	53
Locally Sourced: Identifying Knowledge Practices from the ACRL Framework within Professional Contexts, Heather J. Stecklein	53
A Longitudinal Study of the Online Database Usage of De La Salle University Libraries: Basis for Future Subscription Decisions, April R. Manabat, Karen Cecille V. Natividad	54
MarLiNet Highlights the Maritime Cultural Heritage, Panagiota Dedetzi, Hara Brindesi, Katia Kraniotou, S. Kalligeros, Stavroula Kouri, Anthi Katsirikou, Helen A. Thanopoulou, Nektaria Despotopoulou	54
Measuring Digital Transformation: A Maturity Model as an Approach to Reunite the Library and Archives of Social Democracy of the Friedrich-Ebert-Stiftung, Andreas Marquet	56
National Bibliography Web-based: Potential Technologies for Bibliographic Heritage Diffusion, Eduardo da Silva Alentejo	57
NFC - Enabled Library Management Application, Projes Roy	57
No Library is an Island: How the Academic Libraries of a Public University at the Epicenter of a Pandemic Came to the Conclusion that Services Had to Transition to Remote-only, Todd Simpson, Tinamarie Vella, Meredith Powers	58
Perspectives on Data Reuse from the Field of Natural Hazards Engineering, Maria Esteva, Ellen M. Rathje	58
Portrait of Librarians in Public Libraries, Bojan Kundačina	59
Pub(lic) Opinion Crawl: Lowering Barriers for Qualitative Library Assessment, Rebecca Nowicki, Kate Holvoet	60
The Rare Book and Manuscript CRAI Library of the University of Barcelona inside the Process Management Model, Judit Casals Parladé, Neus Verger Arce	61

Relationship Analysis between Children Interests and Their Positive Emotions for Mobile Libraries' Community Development in a Tsunami Area, Masatoshi Hamada, Michiko Tsubaki and Takafumi Suzuki	62
Research and University Libraries as Future Scientific Publishers, Dariush Matlabi, Saba Roshanzamir	62
The Role of Information Services in Graduate Business and Law Teaching: Advances in a Qualitative Research at ESADE Business & Law School, Alma Beatriz Rivera-Aguilera and Josep Soler Teixidor	63
Special Libraries in the 21 st Century: A Case Study at the National Archaeological Museum's Library (Spain), Silvia Cobo-Serrano, Rosario Arquero-Avilés, Brenda Siso-Calvo	63
Students Assessment about Quality of Library Services at Slovenian Public Universities, Petruša Miholič	64
Students in the Light of Studies of Self-perceived Employability and Information Management Skills, Marzena Świgoń	65
Study of the Brazilian Literature on Information Behavior, Grazielle Magnólia Nogueira Ferreira and Beatriz Valadares Cendón	65
A Study of the Quality of Work Life for the Staff of Greek Academic Libraries, Noula Alvanoudi	66
Survey of Users' Level of Satisfaction toward Inclusive Management and Marketing of Library Services, Oluwatoyin Oyeyemi Obinyan	67
Sustainable Development Goals (SDGs) Inspiring Library Projects Planning, Rosario Arquero-Avilés, Silvia Cobo-Serrano, Gonzalo Marco-Cuenca	67
Technological Innovation in Library and Information Science Online Education: San Jose State University Case Study, Mei-Ling Wang	68
Text and Data Mining for the National Library of Greece in Consideration of Internet Security and GDPR, Marinos Papadopoulos & Michalis Gerolimos & Konstantinos Vavousis & Christos Xenakis	69
Theses and Dissertations from ULisboa to the World: A Case Study on the International Visibility of Academic Publications in the Institutional Repositories of the University of Lisbon, Luiza Baptista Melo, Sílvia Costa Lopes, Susana Oliveira Henriques, Tatiana Sanches	70
Topic Modeling Techniques for Library Chat Reference Data: Challenges, Solutions, and Future Directions, HyunSeung Koh and Mark Fienup	71
Towards a New Generation of Digital Repository of Scientific Institutes, Tomasz Parkoła and Blazej Betanski	72
Training in the Preservation of Written Cultural Heritage a Priority in the Activities of the University of Library and Information Technology, Ivanka Yankova, Iskra Tsvetanska, Boryana Hadzhieva	74

Triage: Special Collections Instructional Services in the Age of COVID-19, Jenifer Ishee, Jennifer McGillan, Carrie Mastley	74
Understanding Librarians' Continuing Professional Development. Agnes Namaganda and Omona Walter	75
Use of ACRL Information Literacy Frameworks in Information Literacy Instruction, Ma Lei Hsieh, Sharon Yang, Patricia Dawson	75
User Studies and Comparative Librarianship: How, Why and What For, Tomás Bocanegra Esqueda	76
Using Phenomenological Interviewing to Learn from Underserved User Communities, Amanda L. Folk, Tracey Overbey	77
Using the Gap Analysis Method to Determine Health Information Literacy Needs of the Drug Court Population, Jenny S. Bossaller, Denice Adkins, Anne M. Dannerbeck Janku	78
UX Perspectives Regarding the Development of Public Library Personas, Martha Kyrillidou, Abigail Smith, Monica Coghlan, Camille Roccanova	79
Wikipedia and Library & Information Science: A Bibliographic Review, 2001-2020, Laurie M. Bridges	80
Bibliometric Analysis of the Journal Act (1894-1915.), Vera Petrovic, Jelena Smailagic	80
Navigating the Visibility of New Scholarship: An Analysis of Academic Library Websites' Documentation on Altmetrics, Ling-li Tseng and Ming-yueh Tsay	81
Author Index	83